# Massachusetts Department of Environmental Protection Program Plan/ Environmental Performance Partnership Agreement 2005-06

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Massachusetts Department of Environmental Protection

U.S. Environmental Protection Agency New England





States and USEPA propose a new environmental partnership that will encourage continuous improvement and foster excellence in state and federal environmental programs. This new approach will reflect the advances made in environmental protection in the United States over the past two decades and recognize that existing policies and management approaches must be modified to ensure continued environmental progress. We must direct scarce public resources toward improving environmental results, allow states greater flexibility to achieve those results, and enhance our accountability to the public and taxpayers.
Joint Commitment to Reform Oversight and Create a National Environmental Performance Partnership System, May 17, 1995
partnership, n. The state or condition of being a partner
partner, n. One who is associated with another in a shared activity

# Massachusetts Department of Environmental Protection Program Plan/ Environmental Performance Partnership Agreement 2005-06

# **Massachusetts Department of Environmental Protection**

# **US Environmental Protection Agency Region I**

# Agreement

This agreement is effective	as of October 1, 2004 and shall	l remain in effect until September 30, 2006, unl	ess amended by mutual consent.
Robert W. Varney	Date	Robert W. Golledge, Jr.	Date
Regional Administrator		Commissioner	
US Environmental Protection	on Agency	Massachusetts Department of	
New England		Environmental Protection	

# Massachusetts Department of Environmental Protection Program Plan/ Environmental Performance Partnership Agreement 2005-06 Table of Contents

Introduction1	
MA DEP's Strategic Focus for 2005	Goal 3: Manage Waste and Clean Up Waste Sites23
Introduction to the Performance Partnership Agreement	National Status and EPA Strategies
Parties to the Agreement	Massachusetts Status
Scope of the Agreement	EPA Regional Sub-Objectives and Targets for Waste
E Pilot for the Water Goal	MA Objectives, Targets & Indicators of Environmental Improvement25
Performance Partnership Grant	MA Baseline Conditions for Waste Management & Waste Site Cleanup29
Public Participation in PPA/Program Plan Development	Key Strategies – Waste Reduction
Self-Assessment	Solid Waste Master Plan Development
Assessment, Evaluation and Revision	Solid Waste Master Plan Implementation
	Reduce Solid Waste and Promote Recycling34
Goal 1: Clean Air4	Toxics Management and Reduction – TURA Program37
National Status and EPA Strategies	Beyond ERP37
Massachusetts Status	Proper Operation of Solid Waste Management Facilities38
EPA Regional Sub-Objectives and Targets for Clean Air5	RCRA39
MA Objectives, Targets and Indicators of Environmental Improvement6	Oversee Clean-ups at RCRA Corrective Action Sites40
Massachusetts Baseline Conditions for Clean Air	Industrial Wastewater41
Key Strategies	Program Development and Support42
Emission Reduction9	Key Strategies – Waste Site Cleanup
Ozone and Particulate Matter Attainment Planning10	Maximize Risk Reduction43
Inspection & Maintenance Program	Increase Rate of Cleanups44
Mobile Source Air Pollution Control14	Ensure the Quality of Cleanups at Waste Sites
Green House Gases15	Provide Direct Oversight for Federal Sites
Diesel	Multi-Site Cooperative Agreement52
Toxics	Massachusetts Military Reservation:
Air Monitoring Network19	Perchlorate in Groundwater
Acid Rain20	Impact Area Groundwater Study
	Leaking Underground Storage Tanks (LUST)53
Goal 2: Clean and Safe Water22	Participate in ASTSWMO &NEWMOA53
National Status and EPA Strategies	Assist in Enhancing Homeland Security54
Massachusetts 2005-2006 PPA E Pilot for Water Programs	Restoration & Redevelopment of Brownfields Properties54
Water Program Milestones Deliverables	

# Massachusetts Department of Environmental Protection Program Plan/ Environmental Performance Partnership Agreement 2005-06 Table of Contents

Goal 4: Health Communities – Environmental Justice	
Initiatives	57
Massachusetts Status	
Massachusetts DEP 2005-2006 Healthy Communities Priorities	
Urban Area Compliance Assurance	58
Urban Non-Responder NORA/Lien Enforcement Project	58
Asbestos Enforcement Initiative	58
Massachusetts Military Reservation: Perchlorate in Groundwater	59
Brownfields Redevelopment	
License Site Professional (LSP) Enforcement	
EJ Area/Municipalities-Specific Initiatives	60
Waste Site Clean-Up Non-Responders Initiatives	61
Strategic Investments and Innovation	63
Quality Assurance Management Program (QA/QC)	64
Reporting Requirements	65
Regulation and Policy Development – Fiscal Year 2005	570
Compliance and Enforcement Strategy	77
Grant Budget	83

# Massachusetts Department of Environmental Protection Program Plan/ Environmental Performance Partnership Agreement 2005-06

# MA DEP's Strategic Focus for 2005

The mission of the Department of Environmental Protection is to protect and enhance the Commonwealth's natural resources – air, water and land – to provide for the health, safety, welfare and enjoyment of the people and the protection of their property.

The Department is now emerging from a period of several years when budget cuts threatened to make that mission impossible. In 2005, the Department finds itself about 25% smaller than it was three years ago, but returning to fiscal and programmatic stability. Recognizing the evolution in environmental regulation and the need to manage more efficiently, DEP has changed its focus. In order to accomplish our mission with our reduced staffing and resources, the Department will focus on the following activities which can be grouped into six organizing themes.

#### Creating a shared mindset about how we are working

# More protection and less process

- Expansion of ERP and certifications
- Greater emphasis on general permits vs individual permits
- Reform adjudicatory appeals process
- Expand the use of presumptive approvals

# Measuring progress of environmental results

- Wall Experiment Station
- Air monitoring
- Monitoring drinking water quality
- Monitoring wetland's change or loss
- Monitoring Ambient Water Quality

# Using technology to improve process and protection

(not just automating, improving our process with technology)

- Complete EDEP
- Expand Internet presence and system utility
- Automated compliance and enforcement data systesm
- Increase the utility of GIS
- Increased public access to environmental data

• Upgrade Wall Experiment Station

# Working on issues that will realize significant environmental gains as a result of concentrated effort

#### **Ensuring Compliance**

- High impact and high visibility compliance initiatives
- Increase the volume of audits
- Data mining for compliance trends
- Lab certification
- Strike Force enforcement
- ERP sector compliance
- Wall Experiment Station

#### Locating and responding to threats

- Continuation of wetlands enforcement cases outside the system
- Look for highest risk activities operating outside the system
- Finding hidden environmental threats
- Improperly closed landfills
- Monitoring drinking water
- Develop Perchlorate limits
- Expand ERP to manage small source threats
- Homeland security/Anti-terrorism
- Enhance emergency response capabilities
- Wall Experiment Station
- Improve use of data to identify important problems
- Improve targeting based on threats

# Inventing new solutions for environmental problems

- Estuaries nutrient limits
- Interstate transport of air pollutants
- Continue mercury reduction initiatives
- Link of transportation to air quality improvements
- MTBE in drinking water
- Implement climate change initiatives

# **Introduction to the Performance Partnership Agreement**

The National Environmental Performance Partnership System (NEPPS) represents an evolving approach to the federal-state relationship in environmental protection. Its intent is to develop a system that is based upon environmental goals and measures of success and allows states maximum operating flexibility to accomplish their environmental priorities. This agreement consists of the MA DEP Performance Partnership Agreement/ Program Plan for Fiscal Years 2005-2006, and includes discussion of programmatic priorities that will guide both DEP and EPA's work in Massachusetts during the coming two years, a statement of the goals, objectives and environmental targets that will be the framework for DEP's program specific work plans, outlines of those workplans as envisioned for the coming two years, and an assessment of DEP's current status in achieving its environmental goals, objectives and targets.

The PPA/Program Plan builds on the effort of the previous MA DEP/PPA to allocate resources toward environmental priorities and to focus on producing actual environmental results in an increasingly challenging time of resource constraints. It includes specific environmental indicators and performance measures to measure progress toward our goals. More work is required and will be undertaken during the term of this PPA/Program Plan to improve and expand our use of environmental measures.

The goals, objectives and targets that form the framework for DEP's programmatic work plans have been crafted so that the Department's work can be seen in alignment with goals, objectives and targets developed by EPA Region I in the EPA New England Draft FY 2003-2008 Strategic Framework. To view the EPA Strategic Plan, go to the EPA website <a href="http://www.epa.gov">http://www.epa.gov</a> and look under Key Issues for "Strategic Plan" or go directly to <a href="http://www.epa.gov/ocfo/plan/plan.htm">http://www.epa.gov/ocfo/plan/plan.htm</a>.

# **Parties to the Agreement**

This agreement formalizes the partnership between DEP and the EPA and will guide the working relationship and activities of both agencies during 2005 and 2006 (October 1, 2004 to September 30, 2006).

# **Scope of the Agreement**

This PPA/Program Plan is the second since the Department made a significant change in the scope of its Performance Partnership Agreement in FY 2004.

- This agreement provides an overview and summary of all the work to be undertaken by the Department, not just the Federally funded portion of our programs. Prior to FY 2004, the PPA and the Program Plan were two separate documents describing separate parts of the Department's workload, most federally funded work in the PPA and state-funded work in the Program Plan.
- This agreement includes both the Department and EPA Region I's
  anticipated objectives and work commitments in Massachusetts for the
  upcoming two-year period. Previous PPA's have included the
  Department's work commitments only.

Combining the PPA and Department-wide Program Plan allows the reader to see the overarching plan for the Department's environmental goals and describes the programmatic work that will achieve those goals. Including EPA Region I's work plan for Massachusetts provides a comprehensive overview of the environmental protection work that will be undertaken in Massachusetts over the next two years.

#### E Pilot for the Water Goal

As part of this PPA, DEP is piloting an innovative approach to developing environmental goals and the work plans to achieve those goals and disseminating them via the Internet. Information on DEP's water programs is not included in the text of this document. The electronic work plans for DEP's Water Programs can be found at <a href="http://mass.gov/dep/brp/epp/epphome.htm">http://mass.gov/dep/brp/epp/epphome.htm</a> and is incorporated into this PPA by reference.

# **Performance Partnership Grant**

EPA Program Grants that have been combined under the Department's Performance Partnership Grant and that are overseen by EPA through the Performance Partnership Agreement are:

• Clean Air Act, Section 105

- Clean Water Act, Section 106 (Water Pollution Control); Section 319 (Nonpoint Sources Management); Section 104(b)(3) (Water Quality and Wetlands)
- Resource Conservation and Recovery Act (RCRA), Section 3011
- Safe Drinking Water Act (SDWA), Section 1443 (a)(1)
- Safe Drinking Water Act, Underground Injection Control, Section 1443 (b), and
- Pollution Prevention Incentives for States (PPIS).

# Public Participation in PPA/Program Plan Development

The Department has taken public comment in developing the PPA/Program Plan.

- A public comment period for the draft 2005-2006 PPA ran from Wednesday, December 15, 2004 to Friday, December 31, 2004. The draft PPA was posted on the DEP website at <a href="http://mass.gov/dep/ppa/ppahome.htm">http://mass.gov/dep/ppa/ppahome.htm</a> with a notice on the front page of the website that the document was available for comment. Individual notices that the draft was available for comment were sent to individuals and organization that have actively commented on draft PPA's in the past.
- Notice of the draft PPA was presented to the DEP Fees Advisory Committee.
- Comments received during the comment period were reviewed and incorporated into the final 2005-2006 PPA

#### **Self-Assessment**

This 2005-2006 Environmental Performance Partnership Agreement represents a major effort to make the PPA shorter, more concise and inclusive of both EPA Region I and Massachusetts Department of Environmental Protection work to protect and enhance our environment. On-going self-assessment has driven the choice of strategic priorities and programmatic targets, strategies and activities outlined under the Air, Water and Waste Goals in this PPA/Program Plan.

The Sections describing each Goal within the PPA provide detailed information on baseline environmental conditions in Massachusetts and the programmatic objectives, targets, environmental indicators and program work that DEP has developed to address those baseline conditions. Each Section also includes

charts that lay out the objectives and environmental targets that DEP and EPA Region I have developed to address Massachusetts' environmental problems. A "Key Strategies" chart in each section juxtaposes the work plans for DEP and EPA Region I and allows the reader assess how the work of the two agencies meshes together to provide environmental protection to the citizens of Massachusetts.

#### Assessment, Evaluation and Revision

This agreement spans two years. The Department will provide mid-year reports on July 1, 2005 and 2006 and year-end reports on January 1, 2006 and 2007 to EPA. Mid-year reports will summarize the status of federal grant expenditures at the mid-year on a grant basis only. Final Reports will summarize activities and progress made toward environmental goals and in meeting targets and key work plan commitments. Any amendments to this agreement, based on changed priorities or resources, will be included in the Final Progress Report for 2005.

# **National Status and EPA Strategies**

Air quality in the United States has steadily improved since the 1970s according to EPA's summary of air quality trends. This trend toward cleaner air has occurred even as our economy has increased by 161% in gross domestic product, miles traveled by cars and trucks have increased by 149%, and energy consumption has increased by 42%. EPA continues to look for progressive solutions to remaining indoor and outdoor air pollution problems which can cause breathing difficulties, long term damage to respiratory and reproduction systems, cancer and premature death.

Air pollution also can affect the environment by reducing visibility; damaging crops, forests and buildings; acidifying lakes and streams; and stimulating the growth of algae in estuaries and the bioaccumulation of toxics in fish. Bioaccumulation poses particular risks to Native Americans and others who subsist on plants, fish and game. Certain chemicals emitted into the air diminish the protective ozone layer in the upper atmosphere. Rapid development and urbanization generate air pollution that travels great distances and across international boundaries.

This broad range of problems requires an equally broad strategy and choice of appropriate tools, from a national approach at the federal level to home-grown solutions at the local and regional level. EPA will work closely with public and private sector partners and stakeholders to develop the tools – such as monitoring, modeling, and emission inventories – that allow states, tribes and localities to address these more localized problems. Many of these tools employ innovative techniques, such as voluntary programs for retrofitting diesel engines or community-based approaches to toxics that are well-suited to the local nature of these problems.

Ongoing research continues to identify new air pollution issues in areas from indoor air to radiation. EPA NE will work with our partners to achieve results.

### Key Strategies:

- Health-based air-quality standards and reduced risk from toxics
- Reduce exposure to harmful indoor pollutants

- Protect the ozone layer and reduce overexposure to ultraviolet radiation
- Minimize unnecessary releases of radiation
- Reduce greenhouse gas intensity
- Enhance science and research

#### **Massachusetts Status**

Many activities such as the burning of fossil fuels and industrial processes release harmful by-products. Since each adult breathes over 3,000 gallons of air per day, even small amounts of pollutants can harm the body. Ground-level ozone, fine particulate and air toxics can cause acute and chronic respiratory problems in sensitive individuals and affect even healthy individuals when ambient levels are high. Acid rain and ozone threaten the environment and the buildup of carbon dioxide and other greenhouse gases contributes to global warming, putting our ecosystems, farms, forests and coastline at risk.

The Department's focus on reducing ozone, fine particles, toxic air pollutants, atmospheric deposition of mercury and greenhouse gases requires integrated, comprehensive solutions at local, state, regional and federal levels. The need for significant additional emission reductions provides a powerful incentive for solutions such as the Department's Environmental Results approach (Beyond ERP) and non-regulatory approaches like pollution prevention, energy efficiency and smart growth that produce multiple benefits and in some cases, such as energy efficiency, produce significant savings.

Levels of carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO<sub>2</sub>), lead (Pb) and some particulate (PM10) in Massachusetts's air have fallen to well below national health standards as a result of cleaner cars, cleaner fuels and other air pollution control programs. However, the trends toward larger vehicles (more than half of new passenger vehicles are SUVs, vans and pick-ups), increased travel and stagnant vehicle energy efficiency are eroding some of the gains from generally cleaner cars. In addition, new efforts are needed to reduce emissions of ozone precursors and fine particulates (diesel).

# **EPA Regional Sub-Objectives and Targets for Clean Air**

#### **Healthier Outdoor Air (Sub-objective 1.1)**

More People Breathing Cleaner Air (Sub-objective 1.1.1)

- Ozone by 2010, outdoor 8-hour ozone will be at healthy levels for 84% of people living in poor air quality areas in 2002
- Ozone by 2010 reduce ozone precursors emissions significantly based on state attainment plans
- Particulate Matter by 2010, outdoor fine particles will be at healthy levels for 100% of people living in poor air quality areas in 2002
- Reduce emissions from stationary sources and mobile sources through federal regulation

## Reduced Risk from Toxic Air Pollutants (Sub-objective 1.1.2)

- Other Criteria Pollutants Thru 2008, healthy levels (compliance) will be maintained for all of NE for CO, SO2, NO2 and lead
- Air Toxics Thru 2010, reduce ambient concentrations and exposure to air toxics through federal regulations and area-specific community-based targets
- Reduce acid rain, mercury deposition
- Support further use by state of alternative strategies such as Massachusetts ERP and Beyond ERP Programs and compliance assistance to address minor and synthetic minor sources, and place-based targeting to address Environmental justice issues.

#### Healthier Indoor Air (Sub-objective 1.2) (Note: Indoor Air is addressed in Massachusetts by the Department of Public Health, not by DEP in the PPA)

- By 2008, 20% of schools will have improved air via Tools for Schools, asthma education and radon program
- By 2008, 10K homes will have gone through radon program

#### Protect the Ozone Layer (Sub-objective 1.3)

• By 2010, in New England, there will be full compliance with handling requirements for ozone-depleting substances

# Minimize Unnecessary Releases of Radiation (Sub-objective 1.4)

Enhance Radiation Protection (Sub-objective 1.4.1)

Maintain Emergency Response Readiness (Sub-objective 1.4.2)

• Support cleanup of decommissioning nuclear power plants. Support MA state radiation program infrastructure. Support federal cleanup, Emergency Response (ER) and drinking water programs.

# Reduce Greenhouse Gas Intensity (Sub-objective 1.5)

• The region will support the New England Governors in their goal of reducing regional greenhouse gas emissions to 1990 levels by 2010

# **Enhance Science and Research (Sub-objective 1.6)**

Provide Science to Support Air Programs (Sub-objective 1.6.1)

Conduct Air Pollution Research (Sub-objective 1.6.2)

• Through 2010, use the best available scientific information, models, methods and analyses to support air program-related guidance and policy decisions. By 2006, have the Regional State/Tribal Air Monitoring Programs fully compliant with EPA Order 5360.1

# Massachusetts Objectives, Targets and Indicators of Environmental Improvement

Ozone, Particulates and other Criteria Pollutants –

Reduce the emissions of ozone precursors and PM 2.5 and manage emissions of other Criteria Pollutants in MA (CO, NO2, SO2, PM10, Pb)

- Ozone attain the Ozone 8-hr standard by 2010 and with the 1-hr standard by 2007
- Ozone reduce the transport of ozone and ozone precursors into MA from out-of state sources
- Ozone work to ensure EPA's national air program adequately addresses transport issues
- Other Criteria Pollutants maintain compliance with the CO, NO2, SO2, PM2.5 and PM10 standards

#### **Indicators:**

- Trends in air quality for carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, particulate matter, ozone, precursor volatile organic compounds, and oxides of nitrogen concentrations from the air monitoring networks (calendar years)\*
- # and % of Massachusetts residents exposed to air that meets the NAAQS for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter (including 2.5), and lead (Pb) (calendar years)
- # of nonattainment areas and their associated populations that reach attainment, (including the number of ozone nonattainment areas that meet the 1-hour ozone standard)(calendar year)\*
- Emissions reductions since 1990 for each criteria pollutant \*
- Redesignation of areas attaining the current NAAQS, and designations of areas for the 8-hour ozone and PM-2.5 NAAQS\*

## Air Toxics - Decrease the emissions of toxic air pollutants (Dioxin, Mercury, VOCS, HAPS)

- Continue to reduce air toxics emissions
- Determine asbestos demolition/renovation compliance rate target through the Beyond ERP Initiative
- Participate with EPA on further use by state of alternative strategies such as Massachusetts ERP and Beyond ERP Programs and compliance assistance to
  address minor and synthetic minor sources, and place-based targeting to address Environmental Justice issues

# Acid Rain - Minimize atmospheric deposition of acids\*

- Reverse damage to lakes and ponds
  - Increase level of sustainable forestry

# Mercury Deposition - Minimize atmospheric deposition of mercury in MA by reducing emissions and releases

- Achieve at least 85% reduction in mercury emissions from power plants
- 75% reduction in mercury emissions/releases by 2010
- Eventual elimination of anthropogenic mercury use, emissions/releases

#### **Indicators:**

Trends in emissions of toxic air pollutants (TRI supplemented by TURA)\*

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<sup>\*</sup> ECOS Core Performance Measures

- Air toxics ambient data from the state's special ozone monitoring network and special monitoring studies (calendar years)
- Fresh water fish tissue concentrations of mercury
- Reductions in air toxic emissions from 1990 levels \*
- State progress in collecting and compiling ambient and emission source data for toxics to better understand the nature and extent of the air toxics problem\* (Monitoring data results)
- Wet deposition; acidity of water bodies susceptible to acidification
- Emissions of air toxics, in particular mercury, other heavy metals and VOCs (calendar years)
- # of mercury fresh water fish advisories/concentration of mercury in fish
- Amount of mercury diverted from the waste stream
- Stack tests results from sources emitting mercury and subject to testing requirements

## Regional Haze - Continue to make progress on regional haze issues

- Source-specific controls in place by 2013 to reduce MA contribution to haze in Class I areas
- Achieve the regional haze standard by 2064
- Submit the interim 10-year SIP and demonstration of required emissions reductions by the due date to be determined by the EPA

#### **Indicators:**

• None at this time

# Minimize Green House Gas Emissions through the Goals of the New England Governors Conference:

- By 2010: GHG emissions = 1990 emissions
- By 2020: GHG emissions = 90% of 1990
- Eventually reduce regional GHG emissions sufficiently to eliminate any dangerous threat to the climate (75-85%) below 2001 levels

#### **Indicators:**

• Emissions reductions in greenhouse gases

<sup>\*</sup> ECOS Core Performance Measures

# **Massachusetts Baseline Conditions for Clean Air**

#### **Ozone, Particulates and other Criteria Pollutants**

- **CO**: 2<sup>nd</sup> highest 8-hour values have declined from 3.1-5.6 ppm in 1999 to 1.4-3.6 in 2002, well below the standard of 9 ppm. Emissions have dropped by 21% from 1990-1999. Inventory data for 1999 is the most recent available.
- NO2: annual averages experienced no significant change between 1999 (0.004-0.030 ppm) and 2002 (0.004-0.025 ppm) remaining well below the standard of 0.05 ppm. Emissions have dropped by 6% from 1990-1999. Inventory data for 1999 is the most recent available.
- **SO2**: annual averages are declining from 0.004-0.007 ppm in 1999 to 0.002-0.006 ppm in 2002 (all well below the standard of 0.030 ppm) Emissions have dropped by 37% from 1990-2001.
- **PM10**: Annual averages are steady, ranging from 14-32  $\mu$ g/m<sup>3</sup> in 1999 to 11-31  $\mu$ g/m<sup>3</sup> in 2002 (annual standard = 50). Preliminary data indicate that all monitors are in attainment of the standards. DEP is collecting PM10 inventory data for a 2002 baseline inventory.
- **PM2.5**: Annual averages are declining, with ranges from 9.02-15.42  $\mu$ g/m<sup>3</sup> in 1999 to 7.5-14.6  $\mu$ g/m<sup>3</sup> in 2002 (annual standard = 15). DEP is collecting PM2.5 inventory data for a 2002 baseline inventory.
- **Pb**: Quarterly means have been stable at levels well below the standard (1.5 μg/m3), ranging from 0.01-0.03 in 1999 to 0.01 in 2003. DEP does not collect Pb inventory data.
- O3: The trend in the number of 1-hour ozone exceedances continues to decrease over the long-term although the number of annual exceedances varies considerably based on weather conditions (5 in 1999, 1 in 2000, 10 in 2001, 22 in 2002, and 2 in 2003). The long-term trend in the number of 8-hour ozone exceedances is unchanged. Annual exceedances vary based on weather conditions (85 in 1999, 121 in 2002; 34 in 2003). Emissions of the ozone precursor VOC have dropped by 25% from 1990-1999. Inventory data for 1999 is the most recent available.
- Ozone Transport About 86% of ozone and ozone precursors in MA comes from other states (according to EPA CSI modeling).
- **PM Transport** No modeling of PM transport for MA is available at this time. "Background" PM appears to be about 60-80% of the maximum values in urban centers, suggesting that transport accounts for more than half of PM. No data available
- Haze Baseline "deciviews" to be established by the June 2004 MANE-VU Board Meeting

#### Air Toxics

- **Dioxin:** BWP is developing a dioxin emissions inventory
- Mercury: Mercury emissions from Municipal Waste Combustors have declined by 90% from the mid 1990s to 2002. Since there is no existing mercury emissions standard requiring reduction of mercury emissions from power plants, such emissions have not declined.
- Mercury: Mercury emissions and releases were in the range of 1243 and 2140 pounds in 2002.
- PAMS: Values for formaldehyde, acetaldehyde, benzene, toluene, and xylene for the past three years have been relatively flat. For the past three years
- HAPS: Air releases of Hazardous Air Pollutants decreased in calendar years 1990-2000 from 152,874,986 lbs. to 7,169,355, (a 54% reduction)
- **Asbestos**: BWP received 15,000 Asbestos demolition or removal notifications last year and inspected 812 removals. We do not have definitive information the % of demolitions and removals that are completed in compliance with the requirements.
- Acid Deposition: Wet deposition ph has improved from 4.4 at both MA sites in 1997 to 4.5 and 4.6 in 2002

#### **Greenhouse Gas**

 Based on a greenhouse gas inventory developed by NESCAUM for the 1990 base year, MA emissions of CO2 equivalents from all sources were estimated to be 115 million tons in 1990.

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
Emission Reduction  Ozone Fine particulates, air toxics CO2 Other criteria pollutants	<ul> <li>Conduct compliance monitoring activities at power plants</li> <li>Employ risk-based targeting of inspections and enforcement</li> </ul>	<ul> <li>Compliance and Enforcement</li> <li>Oversee CEM and stack test reporting for NOx Allowance Trading Program (310 CMR 7.27 and 7.28) (Part 75 sources)</li> <li>Conduct inspections, review compliance reports, monitoring reports and stack tests and take appropriate follow up enforcement action at air operating permit and other stationary air sources</li> <li>Support Regional Implementation of Air Quality National Compliance Monitoring Strategy Including Air Compliance Evaluations: negotiate with EPA on requirements, facilitate statewide consistency by provide guidance/training to regions, track accomplishments</li> <li>Facilitate/monitor State-Wide High Priority Violator Identification (Air pollution sources) and Significant Non Compliance (hazardous waste sources) per EPA grant commitment</li> <li>Routine Regulatory Reporting Implementation for Stage II Facilities (Universe Identification, report receipt, systems management, data entry, report review and enforcement)</li> <li>Data Systems Development</li> <li>CDX - AQ information management project, development of electronic Source Registration forms, and development of new Stationary Source Emissions Inventory data</li> <li>Permitting</li> <li>Support Implementation of Nitrogen Oxides Allowance and Trading Program (310 CMR 7.27 and 7.28): overseeing stack testing, reviewing RATA data certifying accuracy of emissions data, allocating allowances</li> <li>Implement NOx public benefit set aside requirements by reviewing applications from energy facilities to ensure that they have earned the allowances for which they are applying</li> <li>Issue and renew air operating permits and other plan approvals per DEP and EPA regulations</li> <li>Air quality modeling for the Facility Based Impact Risk</li> </ul>	<ul> <li>Oversee approximately 120         Stack tests</li> <li>Conduct approximately 60         inspections of air operating         permit sources and         approximately 60 inspections         of RES sources and several         hundred inspections of small         air sources</li> <li>Review over 1500 compliance         and stack test reports from air         operating permit and RES         sources</li> <li>Complete the CDX – AQ and         new stationary source         emissions inventory system by         Winter 04-05</li> <li>Issue the approximately 20         "proposed" and propose and, to         the extent feasible, issue, the         10 "draft" active Air Operating         Permits that remain to be         issued. Manage the 16 Air         Operating Permit renewals that         come due this year</li> <li>Issue approximately 150 other         air quality plan approvals</li> <li>Complete final engines and         turbines rules by Winter 04-05</li> <li>Complete opacity regulations         by Fall 04</li> </ul>

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
		Evaluation at new solid waste management facilities  Regulation and Policy Development  Support Department of Energy Resources Biomass as a fuel source policy development (Commissioner's Priority)  Promulgate Opacity Regulations and Limited Plan Approval regulations  Beyond ERP  Engines and Turbines Project: promulgate regulations and develop presence strategy  Biotech Project: Air Quality regulations and permit standards  Stage II Project: implementation conduct new inspections, outreach, enforcement strategy to implement new outreach and oversight strategy and coordinate implementation with regional offices  Reporting  Manage routine regulatory reporting requirements and associated data systems development & management activities for air (Stationary Source Emissions Inventory System SEISS, and submit compliance and enforcement data to EPA)	
Ozone and Particulate Matter Attainment Planning  Performance standards for fuels, consumer products, stationary sources, vehicles Permits for stationary sources Inspections, emissions testing, audits, and report review for	<ul> <li>Work with MA DEP on development of 2002 ozone inventories, modeling and control measures which will make up the state's ozone attainment demonstration, which will be due in 2007</li> <li>Work with MA DEP to develop PM2.5 emission inventories</li> <li>Conduct outreach on the PM2.5 standard and communicate EPA's PM2.5 implementation rule</li> <li>Work on local particulate matter programs (diesel retrofits, etc.)</li> </ul>	<ul> <li>Environmental Quality Assessment</li> <li>Use results of Mobile 6 Model to develop mobile source budget in conformance with the SIP</li> <li>Run Mobile 6 model to develop mobile source inventory for the State Implementation Plan</li> <li>Maintain MOBILE6 documentation and upgrades</li> <li>Program Development and Evaluation</li> <li>Develop implementation policies and procedures for implementing the Ozone Transport Commission's multipollutant strategy within the region, resulting in further emission reductions from the regional NOx allowance sources; assess impact on MA sources.</li> <li>Coordinate with and provide input to Department of Energy Resources and NE-ISO on energy policy for C02 and NOX controls</li> </ul>	<ul> <li>Run Mobile 6 during 2004 – 2005</li> <li>Develop Ozone Transport Commission multi-pollution strategy during 2004 – 2005</li> <li>Complete the Eastern MA 1-hour ozone plan mid course review by December 04</li> <li>Perform Ozone screening modeling during 2005 – 2006</li> <li>Support the Ozone Transport Committee's development of a SIP quality modeling program</li> </ul>

10

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
stationary and mobile sources  Follow-up enforcement  Transportation planning to minimize vehicle miles traveled	<ul> <li>Continue to work with MA DEP to assure that PM2.5 data is complete and entered into AQS</li> <li>Complete the PM2.5 nonattainment designation by December 2004</li> <li>Support implementation of new NOx and SO2 emission standards for power plants</li> </ul>	<ul> <li>Prepare and submit to EPA a Mid Course Review for Eastern Massachusetts 1-hour Ozone implementation plan per EPA grant commitment</li> <li>Perform ozone screening modeling to evaluate alternative state and/or regional emission reduction strategies to assess likelihood of attaining the 8 hour ozone standard, consistent regional work plan</li> <li>Support the Ozone Transport Commission Modeling Committee in developing SIP quality modeling program</li> <li>Revise the MA 2002 NOx, VOC, and PM2.5 emissions inventories (Base year for SIP purposes) in response to EPA QA; review and update, as necessary, the MA 2002 NOx, VOC and PM2.5 modeling emissions inventory; document inventory preparation for submission to EPA</li> <li>Develop MA-specific growth factors for the NOx, VOC, and PM2.5 emissions inventory, consistent with regional efforts and for use in 8-hour ozone, Regional Haze, and PM2.5 SIP modeling</li> <li>Serve as State's Designated Air Pollution Control Official on the Ozone Transport Commission (OTC)</li> <li>Coordinate quarterly MA State Implementation Plan (SIP) Steering Committee Meetings</li> <li>Develop comments on EPA's proposed rules and guidance affecting ozone attainment and assure that MA positions are appropriately represented in comments prepared by other regional and national organization in which MA is a member</li> <li>Develop position and provide comments on EPA's PM2.5 standards revision</li> <li>Review EPA rules regarding PM2.5 attainment in order to ensure that MA interests are adequately protected.</li> <li>Develop architectural coatings, consumer product and gas container rules for 8-hr ozone SIP, consistent with MA commitment to Ozone Transport Commission due July 05</li> <li>Participate in the Ozone Transport Commission's Best Available Control Technology/Lowest Achievable</li> </ul>	during 2004 –2005  Revise the 2002 emissions inventory during 2004-2005  Develop MA specific growth factors for NOX, VOC and PM 2.5 inventories by the end of 2004  Develop Architectural Coating, and Consumer Product Regulations in 2005  Develop Gas Can Regulations in 2005 contingent upon California finalizing revisions to its container specifications

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

<b>Key Strategies</b>	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
		Emission Rate policy development initiative (per Commissioner priority)  Represent the MA Air Program on the Northeast States for Coordinated Air Use Management (NESCAUM) and its "sister" research organization, NESCCAF (Northeast Center for Clean Air Futures)	
	Participate in the regional planning organization MANE VU charged with the development of the regional haze strategy	<ul> <li>Haze         Environmental Quality Assessment         <ul> <li>QA/QC the MA portion of the 2002 regional haze inventory for MANE-VU (a regional air planning authority mandated by the Clean Air Act)</li> </ul> </li> <li>Support the development of a regional haze air quality model by MANE-VU         Program Development and Evaluation         <ul> <li>Serve as State's Designated Air Pollution Control Official to the Mid-Atlantic-Northeast Visibility Union (MANE-VU)Ambient Air Quality: Make real time and long term air quality data available to the public</li> </ul> </li> </ul>	<ul> <li>Work with MANE-VU to develop the haze inventory and haze model during 2004 – 2005</li> <li>QA/QC MA portion of the 2002 haze inventory in 2004</li> </ul>
	<ul> <li>Continue to issue press releases and smog alerts warning of elevated ozone levels and elevated levels of fine particles when appropriate (the smog alert service currently notifies 2,000 interested organizations and individuals of predicted poor air quality via fax or e-mail)</li> <li>Continue to assist the NE states with their ozone and fine particle forecasting efforts and to produce the daily ozone forecast map for the NESCAUM states. Outreach to the media will be done to promote the use of air</li> </ul>	<ul> <li>Forecasting         Environmental Quality Assessment     </li> <li>Calculate and post on the MA website the daily Air Quality Index for ozone (seasonal May-Sept.) and for PM 2.5 (annual)         Public Information     </li> <li>Communicate daily air quality forecast to public through media and website</li> <li>Provide EPA air quality data and daily pollutant predictions for the Air NOW website and maps of ambient ozone and PM2.5 air concentrations</li> <li>Prepare and publish the Annual Air Quality Report and post it on the DEP website</li> </ul>	

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
	<ul> <li>quality forecasts in newspapers and on television.</li> <li>Conduct a workshop on air quality outreach and forecasting for the New England states</li> </ul>		
Inspection & Maintenance Program	Continue to work with the DEP assist with implementation of the I/M program	<ul> <li>Compliance and Enforcement</li> <li>Oversee equipment audits by contractors, conduct equipment audits auditing each station at least once during the year</li> <li>Manage emissions waiver program: work jointly with the RMV to issue passing waivers to motorists who have reached the expense threshold</li> <li>Oversee the I &amp;M Network Contractor</li> <li>Support Registry of Motor Vehicles field staff who enforce the testing requirements</li> <li>Permitting</li> <li>Oversee initial certification and biennial recertification of inspectors by contractor</li> <li>Grants/Loans/Technical Assistance/Outreach</li> <li>Respond to and resolve consumer and station complaints and questions</li> <li>Communication for Enhanced Inspection and Maintenance Program</li> <li>Oversee initial and refresher training for inspectors</li> <li>Publish quarterly repair technician newsletter</li> <li>Program Development and Evaluation</li> <li>Improve inspection and maintenance testing equipment and software</li> <li>Evaluate need for, and begin, if necessary, RFR for the next I&amp;M program</li> <li>Equipment effectiveness evaluation: Start up the IM240 Test laboratory</li> <li>Maintain Advisory Committee and subcommittees</li> <li>Public Information</li> <li>Provide Information to the general public on the I&amp;M program</li> </ul>	<ul> <li>Oversee 1,600 equipment audits by contractors</li> <li>Conduct 150 equipment audits</li> <li>Oversee 1,700 covert vehicle audits by contractor</li> <li>Oversee 750 covert visual audit by contractor</li> <li>Assist the Registry with the issuance of waivers to qualifying vehicles and denial of waivers to non-qualifying vehicles (estimate 350 waivers may be needed)</li> <li>Oversee initial certification and biennial recertification of inspectors by contractor (estimate 1,500 inspectors newly certified annually, and 5,000 inspectors recertified biennially)</li> <li>Start up IM240 lab by July 1, 2005</li> <li>Conduct semi-annual Advisory Committee meetings</li> <li>Oversee the updating and publishing of the Registered Repair Facility report card quarterly by contractor</li> <li>Oversee the quarterly publication of the program newsletter by contractor</li> </ul>

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
		<ul> <li>Update and Publish Registered Repairer repair report card Reports to EPA</li> <li>Prepare and submit annual report to EPA mandated by federal I&amp;M regulations (Biennial report not due until 2006)</li> </ul>	Oversee the replacement and upgrade of workstations by contractor by February 26, 2005     Evaluate compliance of contractor with contract performance standards monthly     Prepare annual Interagency Service Agreement for execution with the Registry for IM program funding at DEP by IM Trust
Mobile Source Air Pollution Control Transportation Control Measures LEV		Compliance and Enforcement  LEV Compliance Assurance:	<ul> <li>Respond to routine consumer inquiries to determine if vehicles can be registered in MA</li> <li>Review fleet mix data from 25 manufacturers by May 05</li> <li>Review ZEV compliance plans from approx. six manufacturers by Sept 05</li> <li>Provide updates to RMV on changes to LEV regulations to ensure only CA certified vehicles are registered in MA</li> <li>Review rideshare reports from approx. 300 facilities, and take appropriate follow up enforcement</li> <li>Ensure parking freeze compliance in Boston, Cambridge, and Logan Airport</li> <li>Review of the HOV lane air quality benefits completed by within 3 months after</li> </ul>

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

<b>Key Strategies</b>	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
		to ensure air quality benefits are met.  Implement vent certification process under DEP/EOTC Vent cert regulation.  Transportation Conformity: Review and concur with metropolitan planning organizations annual transportation plans and/or programs.  Permitting  MEPA Reviews of transportation related impacts  Regulation and Policy Development  Develop CA Greenhouse Gas Rule for cars/trucks, (unclear if we're doing this – omit), ZEV compliance flexibility  Revise Tunnel Vent Certification Regulations (310 CMR 7.38) to update monitoring protocols  Big Dig Mitigation: Conduct public process to review, and as necessary revise outstanding transportation agency commitments	submission by MHD  Review and approval of 13 regional planning agencies' annual transportation control plans and/or programs  Complete MEPA reviews for major projects as necessary (note that we have mostly disinvested in the activity)  Adopt CA green house gas rule by end of 2005  Develop ZEV compliance flexibility by June 05  Develop Tunnel Vent Cert. Regulations Revisions (310 CMR 7.38) by June 05  Decision on Big Dig mitigation changes by Spring 05
Green House Gases	<ul> <li>Provide funding support for states and NEG/ECP climate change action plan</li> <li>Oversee \$65,000 grant to New England Governors Conference to assist in administration of Climate Change Action Plan</li> <li>Oversee \$25,000 grant to Institute for Sustainable Energy for assistance in training state officials on use of EPA's building benchmarking tool for energy performance</li> <li>Assist Massachusetts communities (including Amherst, Brookline, Cambridge, Lowell, Somerville) on the</li> </ul>	<ul> <li>Program Development and Evaluation</li> <li>Develop Greenhouse Gas strategy under the direction of the Commissioner's Office and Office of Commonwealth Development, and in cooperation with interstate air pollution control agencies</li> <li>Participate in the development of Regional Green House Gas Registry through NESCAUM, including stationary CO2 source inventory work</li> <li>Decide whether and if so how to implement the CO2 control provisions in 310 CMR 7.29</li> <li>Participate in the Regional Greenhouse Gas Initiative by leading the developing a model rule that would establish a regional Greenhouse Gas cap and allowance program for power plants</li> </ul>	<ul> <li>Decision on implementing C02 controls by Fall 2004</li> <li>Develop model rule for regional Greenhouse Gas cap and allowance program for power plants by April 2005</li> </ul>

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	2005 – 2006 Actions			
	EPA NE	MA DEP	Milestones	
	benchmarking of energy performance of school and municipal buildings  • Promote Energy Challenge to Performance Track facilities in MA (seek commitment to reduce greenhouse gas emissions)  • Provide \$30,000 grant to Massachusetts Climate Network of municipalities to promote greenhouse gas reductions			
Diesel  DEP, EPA and local Boards of Health employ a mix of approaches to controlling diesel pollution including regulatory standards, control equipment testing, fuel and control equipment standards, public information, enforcement of idling regulations and incentives.	<ul> <li>Oversee \$483,000 grant to the City of Medford to retrofit 54 school buses with diesel particulate matter filters &amp; fuel the fleet of 65 buses with ultra low sulfur diesel fuel (ULSF), for use in Medford and 13 neighboring communities</li> <li>Oversee SEP for diesel engine retrofits on school buses in Boston</li> <li>Identify and negotiate new SEPs for retrofits/cleaner fuels for diesel engines</li> <li>Oversee SEP for lower sulfur diesel and retrofit MBTA commuter locomotive engines</li> <li>Manage \$64,000 to the City of Boston to work with the touring trolley companies to retrofit vehicles with oxidation catalysts and encourage use of ULSF</li> <li>Facilitate a pilot project in Boston to reduce air pollution and air toxics from</li> </ul>	<ul> <li>Promulgate and Implement new performance standards for small diesel engines at stationary sources ("distributed generation")</li> <li>Continued implementation of heavy duty vehicle emissions I&amp;M program</li> <li>Continued implementation of Best Management Practice (BMPs) and require retrofits for landfills, wastewater treatment plants funded by the state revolving loan fund, and construction equipment used on the Central Artery/Third Harbor Tunnel</li> <li>Continued effort to prevent truck idling at truck stops and other locations</li> <li>Continued work with individual school bus companies, and school bus company trade associations to implement anti-idling programs and conduct Inspections and follow up enforcement actions</li> <li>Beyond ERP: HIHV School bus Idling: inspect and take appropriate enforcement actions against school buses that violate the anti-idling rules</li> <li>Develop an action plan for further controlling diesel emissions. Plan should be complete during winter of 2004. Strategies under consideration include expanded anti-idling programs, expanded diesel powered vehicle tailpipe I&amp;M program and program enforcement, promoting engine retrofits, promoting the use of ultra low</li> </ul>		

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

<b>Key Strategies</b>	2005 – 2006 Actions			
	EPA NE	MA DEP	Milestones	
	transportation sources thru participation in EPA's voluntary transportation programs, i.e.; Voluntary Diesel Retrofit Program, Anti-Idling Initiatives, Best Workplaces for Commuters and SmartWay Transport. Pilot will launch with a workshop for Boston area businesses this winter.  • Work with Massport to reduce diesel emissions at Conley Terminal thru strategies such as emulsified diesel fuel, ULSF, diesel retrofits, and anti-idling outreach and enforcement  • Recognize employers that encourage their employees to commute to work in ways that reduce pollution & traffic congestion by adding names of these employers to the New England list of the Best Workplaces for Commuters employers.  • Provide and manage \$130,000 New England Asthma Regional Coordinating Council (ACR) grants for asthma reduction plan including school bus diesel retrofit pilots and anti-idling efforts in high risk communities with high risk of asthma	sulfur fuel (ULSF) and tax credits for retrofits and early use of ULSF.		
Toxics	General Toxics Work	General Toxics Work		
NOTE: Other Multi	• Implement the PSD program, in	Reduction in daily toxic emissions resulting from the		
Media Work, such as	close coordination with MA	Enhanced Vehicle Maintenance Program		

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

<b>Key Strategies</b>	2005 – 2006 Actions			
	EPA NE	MA DEP	Milestones	
"Toxics Use Reduction" & "Beyond ERP" that apply equally to the Air & Industrial Wastewater Goals can be found under Goal 3: Manage Waste & Clean Up Waste Sites	<ul> <li>DEP</li> <li>Review and provide comments on major non-attainment NSR permits, Title 5 operating permits, and permits to restrict emissions</li> <li>Review and take regulatory action on changes submitted on MA plan approval requirements at 310 CMR 7.02</li> </ul>	Reduction in daily toxic emissions resulting from the Stage II Vapor Recovery Program     State progress in collecting and compiling ambient and emission source data for toxics to better understand the nature and extent of the air toxics problem (Monitoring data results)      Environmental Quality Assessment     Review and comment on the 1999 National Air Toxics Assessment, specifically targeting MA information     Enter MA-specific mercury emissions data into the National		
Lead: EPA goal to eliminate medically confirmed blood lead levels greater than 10jug/dL among children under age 6 by 2010  Mercury: EPA Regional Mercury Model provides an integrated approach to assessing the effects of mercury from the atmosphere, point and non-point sources on watersheds and ultimately, fish populations  Asbestos Enforcement Initiative: MA DEP's	<ul> <li>Notify MA facilities subject to commercial, industrial, solid waste incinerator (CISWI) regs, and small municipal waste combustor (MWC) regs</li> <li>Work with NESCAUM workshop for states on revisions to the federal NSR program</li> <li>Work with NESCAUM's Air Quality and Public Health Committee on presentations and guidance for states on air toxics regs, community air toxics projects, air toxics risk, and the results of the 1999 National Air Toxics Assessment (NATA) due in 2004</li> <li>Continue to send DEP weekly/monthly updates of new source performance standards (NSPS) and maximum available control technology (MACT) standards and host monthly air toxics conference calls</li> <li>Semi-annually, send DEP</li> </ul>	<ul> <li>Emissions Inventory</li> <li>Update air toxics information on DEP's website</li> <li>Mercury</li> <li>Achieve at least 85% reduction in mercury emissions from power plants</li> <li>Mercury emissions from municipal waste combustors will decrease further due to pollution prevention, implementation of material separation plans, and new controls to be installed in 2003 and 2004 at two Municipal waste combustors</li> <li>Reductions in power plant mercury emissions are expected upon installation of new S02 and NOx controls at large power plants and upon promulgation and implementation of proposed power plant mercury regulations</li> <li>Asbestos</li> <li>Compliance and Enforcement</li> <li>Asbestos demolition/renovation compliance rate target to be determined through Beyond ERP</li> <li>Targeted Inspections: DEP will perform asbestos inspections, targeting inspections based on the potential risk of exposure.</li> <li>Off-Hour Inspections: To increase ability to discover violations, enforcement staff will perform inspections</li> </ul>		

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies		2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones	
asbestos regulations and protect public health through:  Increase targeted inspections  Publicize inspection efforts  Publicize enforcement cases  Dioxin: Two EPA projects are planned.  Barrel Burning Project:  Source Inventories	of NSPS and MACT standards and delegate accordingly  Provide technical assistance and oversight for dispersion modeling for NSR/PSD sources  Provide assistance on MACT, NSR or NSPS applicability determinations  Oversee \$60,000 grant to Lawrence/ Merrimack Valley air toxics project  Oversee \$50,000 grant to North Shore HealthLink air toxics project  Work with states and regulated community in implementing Maximum Achievable Control Technology and New Source Performance Standards  Work with states to approve alternative state air toxics requirements which achieve superior environmental results as compared to federal MACT standards	<ul> <li>Develop the following regulations and guidance for the asbestos program: Asbestos in Soil Regulations and Guidance, Routine Building Maintenance Asbestos Guidance, Revised Asbestos Base Penalty Amounts, Asbestos Cement Shingle Guidance, Asbestos Inspection Protocol for Solid Waste Handling Facilities</li> <li>Beyond ERP: Asbestos at Construction and Demolition Debris Processors Project: develop policies, revise permits as needed</li> <li>Beyond ERP: Asbestos Targeted Group and HIHV:         <ul> <li>Asbestos in soils regulation and policy development</li> <li>Develop Routine Building Maintenance Asbestos Guidance</li> <li>Revise Asbestos Base Penalty Amounts</li> <li>Develop Asbestos Cement Shingle Guidance</li> <li>Asbestos Inspection Protocol for Solid Waste Handling Facilities</li> </ul> </li> <li>Reporting</li> <li>Reporting: Asbestos Notifications receipt and management</li> </ul>		
Maintain the Ambient Air Monitoring Network  DEP meets the data capture standards for all parameters except for PM. DEP is working on a plan in consultation with EPA to improve PM data	<ul> <li>Operate the Lowell carbon monoxide (CO) monitor (until EPA's coop student leaves in the spring of '04, when EPA will then revisit ability to continue support)</li> <li>Conduct performance audits of Bio Watch monitors, ozone and other pollutant monitors</li> <li>Conduct volatile organic compound (VOC) round robin</li> </ul>	<ul> <li>Air quality monitoring network: upgrade per EPA grant commitment</li> <li>Analyze air quality monitoring data</li> <li>Perform routine quality assurance/quality control on the ambient air quality network and data, in compliance with EPA-approved QAPPS</li> <li>Update PM2.5 QAPP, reflecting new equipment and EPA comments</li> <li>Submit electronically to EPA ambient monitoring data on criteria pollutants within 90 days of the close of a calendar quarter, ambient monitoring PAMS data within 6 months</li> </ul>	<ul> <li>Submit draft PM2.5 QAPP Update, in June '05.</li> <li>Complete the installation of the new PM2.5 monitors by winter 05</li> </ul>	

Goal 1: Clean Air - Ensure that Massachusetts citizens have clean air to breathe

Key Strategies	gies 2005 – 2006 Actions			
	EPA NE	MA DEP	Milestones	
capture. Average data capture for PM2.5 rose from 70% to 80% between 2001 and 2002. DEP will continue to work to improve data.	for photochemical assessment monitoring stations (PAMS)  Continue to perform instrument performance audits at NAMS, SLAMS, and PAMS monitoring sites.  Review proposed changes to the air quality monitoring network and evaluate all new monitoring sites for proper sitting criteria	of the close of each month in the ozone season, and air toxics data within six month  Run and maintain the air monitoring network for criteria air pollutants (PM2.5, CO, NO2, SO2, PM10, Pb, Ozone (including BAM, speciation, and IMPROVE monitors) and for meteorological parameters, assuring a data collection of 90% for ozone and 75% for all  Run and maintain ambient monitoring network for non-criteria pollutants (PAMS, Toxics, PM Speciation) consistent with EPA requirements		
Acid Rain		<ul> <li>Program Development and Evaluation</li> <li>Coordinate with New England Governor's Eastern         Canadian Premiers Acid Rain work: forest mapping, acid         deposition, and water quality monitoring</li> </ul>		
Compliance and Enforcement	<ul> <li>Prepare statewide GIS map of air toxics sources, major sources and potential EJ areas/ provide to MA for use in targeting and strategy development</li> <li>Cooperate on development of MA proposal to credit work performed on MA dry cleaner ERP program</li> <li>Employ risk-based targeting of inspections and enforcement; employ additional place-based targeting to address EJ issues, including continuation of cooperative efforts in Lower Mystic River watershed</li> <li>Continue work with MA DEP to improve enforcement action reporting in EPA databases &amp; improve knowledge of facility universe</li> </ul>	<ul> <li>Complete proposal to credit work performed on Massachusetts dry cleaner ERP program</li> <li>Consider additional place-based targeting to address EJ issues, including continuation of cooperative efforts in Lower Mystic River watershed</li> <li>Improve reporting of enforcement action in EPA databases and improve knowledge of facility universe</li> </ul>		

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	Milestones
Other Multi-Media Work (Toxics Use Reduction) & work done as part of the Beyond ERP initiative that applies equally to the Air and Industrial Wastewater can be found in the Waste Strategies Section of this PPA			

# Goal 2: Clean and Safe Water Drinking Water/Surface and Ground Water/Intact and Functioning Wetlands

# **National Status and EPA Strategies**

Over the 30 years since the enactment of the Clean Water and Safe Drinking Water Acts, government, citizens, and the private sector have worked together to make dramatic progress in improving the quality of surface waters and drinking water. Today, drinking water is treated to be safe at the faucet end and protected at the source. Today, the number of polluted waters has been dramatically reduced, and many clean waters are even healthier. A massive investment of federal, state, and local funds has resulted in a new generation of sewage treatment facilities able to provide "secondary" treatment or better. More than 50 categories of industry now comply with nationally consistent discharge regulations. In addition, sustained efforts to implement "best management practices" have helped reduce runoff of pollutants from diffuse, or "nonpoint," sources. But despite these outstanding improvements, population growth continues to generate higher levels of water pollution and places greater demand on drinking-water systems. To further our progress toward clean waters and safer drinking water, we must both maintain our commitment to the core measures we have already established and look for new ways to improve water quality and protect human health.

## Massachusetts 2005-2006 PPA E Pilot for Water Programs

As part of this PPA, DEP is piloting an innovative approach to developing environmental goals and the work plans to achieve those goals and disseminating them via the Internet. Information on DEP's water programs is not included in the text of this document. The electronic work plans for DEP's Water Programs can be found at <a href="http://mass.gov/dep/brp/epp/epphome.htm">http://mass.gov/dep/brp/epp/epphome.htm</a> and is incorporated into this PPA by reference.

# **Water Program Milestone Deliverables**

In addition, there are milestone deliverables that DEP anticipates meeting during the 2005-2006 PPA. A listing of these deliverables can be found at <a href="http://www.mass.gov/dep/brp/epp/epawrk.htm">http://www.mass.gov/dep/brp/epp/epawrk.htm</a>.

# **National Status and EPA Strategies**

Left uncontrolled, hazardous and nonhazardous wastes on the land can migrate to the air, ground water and surface water, contaminating drinking water supplies, causing acute illnesses or chronic disease, and threatening healthy ecosystem in urban, rural and suburban areas. Hazardous substances can kill living organisms in lakes and rivers, destroy vegetation in contaminated areas, cause major reproductive complications in wildlife, and otherwise limit the ability of an ecosystem to survive.

EPA will work to preserve and restore the land using the most effective waste management and cleanup methods available. These include using a hierarchy of approaches – reducing waste at its source, recycling waste, preventing spills and releases of toxic materials, and cleaning up contaminated properties. The agency is especially concerned about threats to our most sensitive populations, such as children, the elderly and individuals with chronic diseases.

#### Key Strategies:

- Reduce waste at its source
- Recycle waste
- Manage waste safely
- Clean up contamination

# **Massachusetts Status**

Controlling and minimizing waste at the source, effectively managing the disposal of waste and the timely assessment and cleanup of historical and sudden releases of oil or hazardous material are critical to maintaining our quality of life, community character and sustainable economic growth. Managing waste and cleaning up oil and hazardous material release sites includes rehabilitating Brownfields for reuse, responding to environmental emergencies and controlling solid waste and hazardous wastes.

Since 1993, the DEP Waste Site Cleanup Program has directed the assessment and cleanup of sites where releases of oil or hazardous material occurred under performance-based regulations (the Massachusetts Contingency Plan, or MCP) in partnership with private-sector consultants (Licensed Site

Professionals). The risk-based requirements of the MCP apply as well to remediation activities at landfills and RCRA sites, resulting in consistent health-protective outcomes across the related programs.

Under the MCP, over twenty thousand sites have been cleaned up since 1993, including, in FY2004, 1654 spills/sudden releases and 690 historic releases. For FY 2004, approximately 82% of the cleanups (94% of spills/sudden releases and 79% historic releases) have resulted in properties acceptable for unrestricted future use. These cleanups are managed by approximately 540 Licensed Site Professionals following the regulations, polices and guidance published by the Department. DEP monitors the effectiveness of the privatized program through direct oversight of specific actions at some sites and through a comprehensive audit and compliance program designed to ensure the quality of response actions. In FY2004, DEP met the statutory mandate of a 20% audit rate by auditing 31% of the eligible universe of sites.

Brownfields development offers an alternative to development of open space ("greenfields") if the hazardous substances they harbor can be cleaned up or controlled to allow for redevelopment. In the next two years DEP will review and update the waste site cleanup program in order to further facilitate Brownfields redevelopment and work with partners to improve coordination among state agencies and increase incentives for municipalities to return abandoned mills and vacant properties to useful purposes.

# **EPA Regional Sub-objectives and Targets**

# Preserve Land (Objective 3.1)

By 2008, reduce adverse effect to land by reducing waste generation, increasing recycling and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.

Reduce Waste Generation and Increase Recycling (Sub-objective 3.1.1) By 2008, reduce materials use through product and process redesign, and increase materials and energy recovery from wastes otherwise requiring disposal.

- Improve infrastructure for food waste composting and improve food waste collection for supermarkets
- Improve collection infrastructure for electronics
- Improve collection and market for marine shrink wrap
- Educate hospitals, educational institutions

## Manage Hazardous Waste and Petroleum Products Properly (Sub-objective 3.1.2)

- Prevent release from RCRA hazardous waste management facilities by increasing the number of facilities with permits or other approved controls
- Approved controls in place for 27 of 28 MA facilities by the end of FY05
- Update controls for preventing releases at facilities that are due for permit renewal by the end of 2006
- Reduce hazardous waste combustion facilities emissions of dioxin and furans and particulate matter
- Increase Underground Storage Tanks that are in significant operations compliance with both release detection and release prevention requirements
- Participate in completion of the functional equivalence workgroup effort
- Conduct an authorization streamlining pilot project to improve our joint process on authorization and inform development of a general RCRA program update

#### Prepare for and Respond to Intentional and Accidental Releases (Sub-objective 3.2.1)

- Continued enhancement of regional response capabilities
- Establish and maintain national capability to respond to simultaneous large-scale incidents
- Strengthen internal and external coordination and communications mechanisms
- Respond to release of hazardous substances and oil spills
- Minimize impacts of potential oil spills by inspecting or conducting exercises or drills at oil storage facilities required to have Facility Response Plans
- Reduce the risk from use and storage of hazardous chemicals and improve local capacity in this area

# Clean Up and Reuse Contaminated Land (Sub-objective 3.2.2)

- Draft 310 CMR 21( c ) regulations and revisions/supplements to MOA, PD and AG statement necessary to be authorized for RCRA Corrective Action
- Perform health and environmentally based site assessments and make final assessment decisions under Superfund and assess RCRA baseline facilities
- Control all identified unacceptable human exposures from site contamination at or below health-based levels for current land and groundwater use conditions at RCRA GPRA baseline facilities and Superfund human exposure sites
- Control the migration of contaminated groundwater through engineered remedies or natural processes at RCRA GPRA baseline facilities and Superfund groundwater exposure sties
- Cleanup and reduce the backlog of leaking USTs and complete remedy decisions and construction of remedies at RCRA GPRA baseline facilities and Superfind sites
- Make land available for reuse

# Maximize Potentially Responsible Party Participation at Superfund Sites (Sub-objective 3.2.3)

- Research a settlement or take an enforcement action before the start of a remedial action at 90% of Superfund sites having viable responsible parties other than the federal government
- Address all Statute of Limitations cases for Superfund sites with unaddressed total past costs equal to or greater than \$200,000

## Provide Science to Preserve and Remediate Land (Sub-objective 3.3.2)

Provide scientific and technical expertise to support cleanup decision-making at Superfund, RCRA, UST and Brownfield sites

#### Conduct Research to Support Land Activities (Sub-objective 3.3.2)

Ensure waste program research prioritites and needs are identified and addressed

# Massachusetts Objectives, Targets and Indicators of Environmental Improvement

#### **Waste Reduction**

# **Reduce Solid Waste and Promote Recycling**

- Solid Waste Master Plan Implementation/By the year 2010 achieve 70% waste reduction (which includes both source reduction and recycling), including:
  - 60% municipal solid waste (MSW) waste reduction,
  - 88% construction and demolition (C&D) waste reduction

#### **Indictors:**

- Total (# of tons) municipal solid waste generated (calendar year)
- Annual amount (# of tons) of solid waste recycled and composted relative to the amount generated (calendar year)
- Amount of solid waste disposed in landfills, resource recovery facilities relative to the total generated in-state (calendar year)
- # of Beneficial Use Determinations
- Grant dollars distributed
- Amount of solid waste diverted from the waste stream through bottle Bill redemptions
- # of inspections
- # of enforcement actions

#### Waste Management

# Prevent contamination of land and water by ensuring that Solid Waste Management Facilities are properly designed, constructed, operated and maintained, and closed

Target compliance rates are to be set through work done in Beyond ERP Initiative

#### **Indicators:**

- Volume of leachate collected at operating landfills (calendar year)
- # of solid waste transfer stations that are in compliance with selected requirements
- # of solid waste facility permits and plan approvals
- # of unlined landfills properly closed with impermeable caps
- # of landfill sites authorized for reuse for open space and/or recreation
- # of inspections
- # of enforcement actions

# Prevent contamination of land and water by ensuring that hazardous wastes are managed safely

• Target compliance rates are to be set through work done in Beyond ERP Initiative

# Massachusetts Objectives, Targets and Indicators of Environmental Improvement

#### **Indicators:**

- % of hazardous waste managed at Treatment, Storage, and Disposal Facilities (TSDFs) with approved controls in place\*
- Annual generation of hazardous waste (# of tons) safely managed
- Weight or volume of household hazardous wastes collected and reused, recycled or properly disposed
- % of hazardous waste managed at Treatment, Storage and Disposal Facilities (TSDF's) with approved controls in place\*
- # of hazardous waste related permits/plan approvals
- # of inspections
- # of enforcement actions

#### **Toxics Management and Reduction**

# Decrease the use and release of toxic substances (TURA Program)

- Continue to reduce toxics use and releases, targets to be determined for individual industrial sectors through work done in Beyond ERP Initiative
- Reduce the quantity of toxic byproducts generated per unit of production
- Increase the industrial sectors regulated through ERP and the number of companies in ERP-regulated sectors that register and participate in the ERP system **Indicators:** 
  - # of new ERP industrial sectors developed
  - #of ERP companies in the system
  - The lbs. of pollution reduced in response to enforcement actions and the % of total reductions achieved through enforcement actions
  - Amount of mercury diverted from the waste stream
  - # of mercury fresh water fish advisories/concentrations of mercury in fish
  - % of non-product outputs reduced for TURA reporters
  - % of non-product outputs reduced for TURA reporters with waste normalized for production
  - Quantity (# of lbs.) of toxics used and generated as waste by-products (calendar year)

# Decrease the toxicity and amount of all waste streams through pollution prevention and recycling

- 75% reduction in mercury emissions/releases by 2010
- Eventual elimination of anthropogenic mercury use, releases/emissions
- Provide convenient hazardous product collection services to all residents and very small quantity hazardous waste generators by 2010
- Continue to reduce the quantity of toxics byproduct generated per unit of production through Beyond ERP
- Substantially reduce the use and toxicity of hazardous consumer products
- Promote Pollution Prevention as the preferred means of compliance with environmental regulations
- Continue to increase the total pounds and % of pollution reduced in response to enforcement actions that incorporate
  - o Pollution Prevention (P2)
  - o Environmental Management Systems (EMS)
  - o Supplemental Environmental Projects (SEPs)

#### **Indicators:**

\* ECOS Core Performance Measure

Goal 3: Manage Waste and Clean Up Waste Sites

# Massachusetts Objectives, Targets and Indicators of Environmental Improvement

- For TURA reporters, the % of productions units reflecting reductions from P2
- # of new ERP industrial sectors developed
- # of ERP companies in the system
- # and % of facilities that adopt P2 in response to DEP enforcement action
- # and % of facilities that adopt EMS in response to DEP enforcement action
- # and % of facilities that adopt SEPs in response to DEP enforcement action and value of SEPs

#### **Waste Site Cleanup**

#### Maximize Risk Reduction at Waste Sites

• Ensure that PRP's achieve a compliance rate of at least 75 % for Immediate Response Action (IRA) submittal requirements, measured one year after discovery of the condition requiring the IRA. Initiate enforcement against those found in noncompliance.

#### **Indicators:**

- At this time, many states, EPA and organizations such as the Association of State and Territorial Waste management officials (ASTWMO) are working to develop appropriate indicators.
- DEP tracks and reports extensive information on site-specific risk reduction measures for sites that fall under the Waste Site Cleanup Program (see Baseline Conditions).

## Increase the rate of cleanup actions at waste sites

- Work to ensure that Response Action Outcome or Remedy Operation Status statements are submitted within six years of release notification for at least 85 % of sites
- Report on the number of Leaking Underground Storage Tank (LUST) cleanups initiated/completed Indicators:
  - At this time, many states, EPA and organizations such as the Association of State and Territorial Waste Management Officials (ASTWMO) are working to develop appropriate indicators.
  - DEP tracks and reports extensive information on site-specific risk reduction measures for sites that fall under the Waste Site Cleanup Program (see Baseline Conditions).

# Ensure the quality of cleanup at waste sites

• Implement operation changes that will result in compliance assistance and/or enforcement for at least 95% of sites found in noncompliance each fiscal year after audit.

#### **Indicators:**

- At this time, many states, EPA and organizations such as the Association of State and Territorial Waste Management Officials (ASTWMO) are working to develop appropriate indicators.
- DEP tracks and reports extensive information on site-specific risk reduction measures for sites that fall under the Waste Site Cleanup Program (see Baseline Conditions).

# Oversee cleanups at RCRA Corrective Action Sites

- Target compliance rates are to be reviewed through work done in Beyond ERP Initiative
- By 2008:
  - o Assessments complete at 100% of the 26 GPRA baseline corrective action sites

# Massachusetts Objectives, Targets and Indicators of Environmental Improvement

- O Human exposure controlled at 100% of the 26 GPRA baseline corrective action sites
- o Groundwater contamination controls in place at 100% of the 26 GPRA baseline corrective action sites
- Corrective action decision implemented at 40% of the 26 GPRA baseline corrective action sites
- o Corrective action construction completed at 30% of the 26 GPRA baseline corrective action sites

#### **Indicators:**

- Oversee activities targeted at controlling or preventing the spread of contamination, preventing human exposure to such releases, and reducing the risk to human exposure and the environment\* as measured by:
- % of listed corrective action sites at which assessment is complete
- % of listed corrective action sites at which human health exposure has been controlled\*
- % of listed corrective action sites with groundwater contamination controls are in place
- % of listed corrective action sites for which a corrective action remedy decision has been made,
- % of listed corrective action sites at which the corrective action decision has been implemented

#### **Brownfields Restoration**

- Facilitate the Restoration & Redevelopment of Brownfield Properties
- Identify Brownfields projects for program assistance
- Implement Brownfields Cooperative Agreement
- Work to assist communities by implementing up to 10 brownfields sites assessments (subject to funding)
- Work to ensure that at least 10 percent of municipalities begin compiling brownfields inventories

#### **Indicators:**

- At this time, no environmental indicators have been developed for this objective; many states, EPA and organizations such as the Association of State and Territorial Waste management officials (ASTWMO) are working to develop appropriate indicators
- DEP tracks and reports extensive information on site-specific risk reduction measure for sites that fall under the Waste Site Cleanup Program (see Baseline Conditions).

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<sup>\*</sup> ECOS Core Performance Measure

# **Massachusetts Baseline Conditions for Waste Management**

#### SOLID AND HAZARDOUS WASTE MANAGEMENT

#### Waste Stream

- As of 2001, 57% of the solid waste stream in Massachusetts has been diverted from disposal thru source reduction and recycling, this compares to 51% in 1999
- 12.8 million tons of solid waste were generated in Massachusetts in 2001 compared to 13.0 million tons in 2000

#### Facilities

• BWP oversees the design, construction, operation, and closure of:

28 Active Landfills 194 Active Transfer Stations 426 Inactive Landfills 3 Active Compost Facilities

• Compliance rates are presently unknown

#### Hazardous Wastes

- BWP oversees hazardous waste management at over 20,000 generators, 1,500 hazardous waste recyclers, and 12 Treatment Storage and Disposal facilities.
- Compliance rates are presently unknown

#### **RCRA** Corrective Action Sites

• BWP is presently overseeing clean up work at 21 Corrective Action Sites

#### TOXICS MANAGEMENT AND REDUCTION

- Massachusetts' manufacturers have reduced their use of toxics by 41%, as of 2002
- Mercury emissions and releases were in the range of 1243 and 2140 pounds in 2002
- As of 2000 85% of the households had convenient access to hazardous waste disposal
- In 2001, 4,200 tons of hazardous products were diverted from the waste stream
- Large Quantity Toxics Users had reduced the amount of their toxic byproduct (waste prior to treatment) by 69%, between 1990 and 2001.
- Massachusetts' manufacturers reduced their on-site releases of chemicals by 92% between 1990 and 2001.
- In 2003, 135 facilities were subject to higher level enforcement actions: at least 10% of these enforcement actions included explicit requirements for pollution prevention through source reduction, with documented reductions of at least 135 tons per year of air pollution and hazardous waste, 13,000 gallons per year of wastewater and 9 million gallons per year in water conservation.
- In 2003, 11 facilities agreed to adopt on environmental management system as a response to DEP higher level enforcement, 8% of the facilities where DEP carried out higher level enforcement.
- In 2003, five facilities agreed to adopt a Supplemental Environmental Project as a response to DEP higher level enforcement, 4% of the facilities where DEP
- carried out higher level enforcement.
- In 2003, about 540 smaller lower level enforcement actions included pollution prevention incentives, including information on OTA to reduce their waste.

Goal 3: Manage Wastes and Clean Up Waste Sites

# **Massachusetts Baseline Conditions for Waste Site Cleanup**

#### OVERVIEW OF WASTE SITE CLEANUP UNIVERSE

	FY 2002	FY 2003	FY 2004	Program to Date <sup>1</sup>
Number of sites in BWSC's database	26,657	28,602	30,483	30,483
Number of sites in BWSC's database that are closed (e.g., Response Action Outcome, NFA)	19,402 (72.8%)	22,196 (77.6%)	23,475 (77.0%)	23,475 (77.0%)
Number of sites in BWSC's database that are open	6,012	5,794	5,445	5,445
Number of notifications <sup>2</sup>	2,005	1,911	1,880	23,850
- number of 2-hour notifications (e.g., sudden releases, spills)	993	1,011	997	11,355
- number of 72-hour notifications (e.g., LUSTs)	439	327	306	5,986
- number of 120-day notifications (e.g., historic releases)	573	573	577	6,509
Number of Response Action Outcomes (RAOs) submitted <sup>3</sup>	1,910	1,847	1,862	20,340
Number of RAOs with Activity and Use Limitations (AULs)	382	135	155	1,589
MAXIMIZE RISK REDUCTION				
Ensure that PRPs achieve a compliance rate of at least 75 percent for Immediate Response Action (IRA) submittal requirements, measured one year after discovery of the condition requiring the IRA.	N/C	N/C	91%	N/A
Number of RAMs/IRAs conducted	2,068	1,956	1,817	24,436
Number of sites at which DEP took response actions	121	102	95	N/A
Amount DEP spent on response actions	\$7,236,465	\$6,107,829	\$4,574,284	N/A
Number of RAOs submitted in the same year as notification received	1,191	1,145	1,136	1,3,416
Number of LUST cleanups initiated	95	89	94	N/A
Number of LUST cleanups completed	132	225	339	N/A

<sup>&</sup>lt;sup>1</sup> Program-to-Date values (through FY04) are provided where available and when applicable.
<sup>2</sup> Includes just the post-1993 notifications under the revised regulations establishing the 2-hr, 72-hr and 120-day notification categories.

<sup>&</sup>lt;sup>3</sup> Parties have 6 years from the date of release notification to achieve an RAO (absent an extension), so only a portion of releases in a calendar year achieves RAO in the same year.

Goal 3: Manage Wastes and Clean Up Waste Sites

Massachusetts Baseline Conditions for Waste Site Cleanup - continued					
	FY 2002	FY 2003	FY 2004	Program to Date	
Number of enforcement actions <sup>4</sup>	631	812	825	5,123	
- following 2-hour notifications	146	175	198	1,353	
- following 72-hour notifications	133	191	195	1,289	
- following 120-day notifications	151	197	178	962	
INCREASE THE RATE OF CLEANUPS					
	FY 2002 notifications in 1996	FY 2003 notifications in 1997	FY 2004 notifications in 1998	Program to Date	
Work to ensure that Response Action Outcome or Remedy Operation Status statements are submitted within 6 years of release notification for at least 85 percent of sites	N/A	N/A	86%	N/A	
Number of sites with RAOs by the 6-year deadline	1,597	1,542	1,564	17,700	
Percentage of sites with RAOs by the 6-year deadline	73.5%	70.4%	69.1%	88.9%	
Average duration to reach RAO <sup>5</sup>					
- following 2-hour notifications	260 d	314 d	303 d	211 d	
- following 72-hour notifications	2.0 yr	2.7 yr	3.0 yr	1.4 yr	
- following 120-day notifications	2.0 yr	2.2 yr	2.2 yr	1.5 yr	
Range of duration to reach RAO (5 <sup>th</sup> to 95 <sup>th</sup> percentile)					
- following 2-hour notifications	24 d – 3.5 yr	22 d – 4.5 yr	11 d – 4.6 yr	28 d – 2.4 yr	
- following 72-hour notifications	50 d – 6.6 yr	55 d – 8.4 yr	61 d – 9 yr	49 d – 5.6 yr	
- following 120-day notifications <sup>6</sup>	0 d - 6.3 yr	0 d – 7.2 yr	0 d – 7.8 yr	0 d – 5.4 yr	

<sup>&</sup>lt;sup>4</sup> The total number of enforcement actions includes those for pre-1993 sites in addition to the 2-hr, 72-hr and 120-day notification categories listed.
<sup>5</sup> These values include the default Tier ID sites
<sup>6</sup> The 5<sup>th</sup> percentile value, 0 days, indicates that the RAO was submitted on the same day as the notification.

Goal 3: Manage Wastes and Clean Up Waste Sites

#### Massachusetts Baseline Conditions for Waste Site Cleanup – continued Program to FY2002 FY 2003 FY 2004 Date Percent reduction in the number of Tier ID sites since FY2000 16% 15% 17% NA (sites at which private parties have not conducted response actions). Number of LSPs registered in e-DEP N/A N/A 19 19 N/A N/A 76 76 Number of BWSC e-DEP submittals ENSURE THE QUALITY OF CLEANUPS

Implement operational changes that will result in compliance assistance and/or enforcement for at least 95% of sites found in noncompliance each fiscal year after audit.

Number of site audits conducted <sup>7</sup>				
- Level 1 audits	1,022	1,987	2,255	NA
- Level 2 audits	252	199	221	NA
Number of audit report findings articles published in the LSPA newsletter	10	5	4	NA
Number of audit case study training classes offered to LSPs	16	6	6	NA
Number of DEP-taught classes offered (excluding audit case studies)	11	0	6	NA
Number of targeted/random comprehensive audits	136 / 72	150 / 46	95 / 36	NA
Number of compliance inspections	1,387	1,245	1,400	NA
Number of higher level enforcement actions	217	159	217	NA
Number of LSPs and other environmental professionals attending DEP training	1,330	230	180	NA
Number of meetings with the LSPA Board	N/A	N/A	4	NA
Number of final or draft policies, guidance, fact sheets, and Q&As issued or revised	10	9	36	NA

32

<sup>&</sup>lt;sup>7</sup> FY02 and FY03 values for the Level 1 and Level 2 audits were derived using a different methodology (counting "sites audited") and may undercount the number of "site audits" conducted by approximately 2 percent.

	FY 2002	FY 2003	FY 2004
Work to assist communities by implementing up to 4 brownfields site assessments (subject to funding)	4	4	4
Incorporate into a newly developed database brownfields inventories generated by 20 municipalities	N/A	N/A	20
Number of cost recovery/priority lien sites where redevelopment was promoted	N/A	N/A	8
Number of public forums where DEP staff was a participant or speaker	N/A	N/A	15
Number of meetings held with regional coordinators	N/A	N/A	6
Number of state/federal partner meetings lead	N/A	N/A	12
Number of EPA-funded Brownfields Cooperative Agreement site assessments conducted	N/A	N/A	4
Number of EJ-related brownfields site assessments implemented using state contractors	N/A	N/A	4
Number of sites funded through UBSA/EJ that were provided with project management		N/A	2
Number of communities assisted that received EPA Cleanup Grants		N/A	2
Number of communities assisted that received new EPA Cleanup Grants		N/A	10
Number of communities provided with proactive outreach	N/A	N/A	20
Number of communities assisted that received Brownfields Comprehensive Revolving Loan Fund money	N/A	N/A	7
Number of brownfields project proponents that received assistance	N/A	N/A	55
Number of EDAs provided with technical assistance	N/A	N/A	45
Number of non-EDAs provided with technical assistance	N/A	N/A	10
Number of projects funded by other federal or state agencies that received technical assistance	N/A	N/A	25
Number of letters provided to public entities requesting assessment and cleanup grant funding	N/A	N/A	28
Number of Covenant Not to Sue applications DEP staff reviewed for the Attorney General's Office		N/A	21
Number of referrals accomplished to other state and federal programs	N/A	N/A	50

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
Waste Reduction			
Solid Waste Master Plan Development		<ul> <li>Program Development and Evaluation</li> <li>Solid Waste Master Plan update and revision/mid course adjustment</li> <li>Work with the external Solid Waste Advisory Committee and Subcommittees Analyzing solid waste streams to help target assistance programs: organics mapping</li> <li>Complete Annual Solid Waste Status Report for 2003 and Update Capacity Projections</li> <li>Reporting</li> <li>Collect, manage, and analyze solid waste Municipal Data Sheets, Processor Surveys, Compost Site Reports</li> <li>Manage routine regulatory reporting requirements and associated data development &amp; management activities for the Solid Waste Management Facility Annual Reports</li> </ul>	<ul> <li>Issue Draft Revised Master Plan by April 2005</li> <li>Issue Final Revised Master Plan by June 2005</li> <li>Complete the Annual Solid Waste Status Report for 2003 by July 2005</li> <li>Manage a total of 650 solid waste reports</li> </ul>
Reduce Solid Waste and Promote Recycling  Solid Waste Master Plan Implementation	<ul> <li>Implement targeted reduction     /efficiency strategies on: Electronics     waste, Food Waste, Green Buildings,     including EPA Facilities</li> <li>Implement targeted sector strategies     on: Health Care/Hospitals, Schools,     Colleges and Universities</li> <li>Provide grant to MA DEP focused on     Recycling Food Waste</li> <li>Provide grant to MA WasteCap     focused on Marine Shrinkwrap</li> <li>Provide assistance to MA DEP for     Food Waste Summit</li> <li>Support electronic recycling     coordination through Northeast     Recycling Council (NERC)</li> </ul>	<ul> <li>Solid Waste Diversion: Schools         Grants/Loans/Technical Assistance/Outreach         <ul> <li>School Recycling Programs/Green Team</li> </ul> </li> <li>Solid Waste Diversion: Residential         Grants/Loans/Technical Assistance/Outreach         <ul> <li>Residential Food and Yard Waste: Home Composting Grants and outreach</li> <li>Residential Food and Yard Waste: Support Pay As You Throw programs</li> </ul> </li> <li>Residential Paper: Award New Springfield MRF contract</li> <li>Residential Paper: Equipment and Technical Assistance – support municipal recycling programs by maintaining tools and assistance</li> <li>Residential Paper: Increase Pay As You Throw programs</li> <li>Residential Paper: Recycling Education and Outreach – Leverage extensive outreach with limited resources</li> </ul>	<ul> <li>Implement The Green Team at 151 schools representing nearly 30,000 students. Start 4 new school recycling programs and expand 8 others. Provide equipment where necessary.</li> <li>Award 20+ communities with home composting bins and/or food waste buckets. Hold 8 compost workshops</li> <li>Provide 2 PAYT grants, provide 15+ communities with PAYT technical assistance, hold 4 PAYT events, and meet with 30+ communities individually on PAYT.</li> <li>Negotiate and award the Springfield MRF contract by Dec. 2004</li> <li>Equipment and Technical Assistance Grants – Award over 20 TA projects, Provide equipment of 40+ communities.</li> </ul>
		Solid Waste Diversion: Commercial Grants/Loans/Technical Assistance/Outreach Commercial Organics: Expand Supermarket Composting	• With EPA grant - support food waste diversion at 55 supermarkets and add another 25 stores.

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
		Project  Manage EPA Organics Grant for supermarket composting  Commercial Organics: Hauler Outreach and Incentives  Commercial Organics: Organics Summit  Commercial Organics: Policy/program development  Commercial Organics: RIRC grants and RLF loans  Commercial Organics: Work with farmers  Commercial Paper and Cardboard: Support municipal business collection programs  Commercial Paper and Cardboard: Work with hospitals Program Development and Evaluation  Commercial Paper and Cardboard: Waste ban: hauler and generator outreach and enforcement	<ul> <li>Give Wastewise awards to 6 largest supermarket chains for joining Wastewise and diverting organics.</li> <li>Provide ongoing technical assistance to composting facilities – perform 30+ site visits</li> <li>Negotiate and enter into MOU with Mass Food Assoc. to have organics diversion industry wide by 2010</li> <li>Hold Organics Summit with 200 participants in Spring, 2005</li> <li>With EPA grant – provide farmers with hands-on technical assistance on BMP's of food waste composting.</li> <li>Award 1 grant to food waste diversion business through RIRC.</li> <li>Provide ongoing technical assistance to the 150+ municipal business-recycling programs. Hold minibusiness recycling conference.</li> <li>Begin development of a hospital strategy through expansion of the Shattuck Hospital Initiative</li> <li>Develop strategy for enforcement of waste bans on haulers and generators</li> </ul>
		<ul> <li>Solid Waste Diversion: Construction and Demolition Debris Program Development and Evaluation</li> <li>Wood and Gypsum Wallboard: C&amp;D Subcommittee:         <ul> <li>Continue to hold regular committee and subcommittee meetings on the C&amp;D ban and market development</li> </ul> </li> <li>Wood and Gypsum Wallboard: Promulgate C&amp;D ban, conduct outreach and oversee facility waste ban planning Grants/Loans/Technical Assistance/Outreach</li> <li>Wood and Gypsum Wallboard: Gypsum wallboard market development/product stewardship</li> <li>Wood and Gypsum Wallboard: Targeted technical assistance and market development grants</li> </ul>	<ul> <li>Promulgate C&amp;D Waste ban - Winter 2005</li> <li>Develop and issue guidance by Winter 2005, hold 2 workshops on compliance with new ban.</li> <li>Hold 5 Gypsum workgroup meetings to develop strategy to divert.</li> <li>Hold 5 Wood workgroup meetings to foster diversion.</li> <li>Initiate Carpet workgroup to develop diversion strategy.</li> <li>Award 1 grant to business diverting C&amp;D material</li> </ul>

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
		Solid Waste Diversion/ Hazardous Products: Mercury Products, Mercury in Schools, and Pesticides Permitting  Oversee Municipal Waste Combustor Mercury Material Separation Plans Grants/Loans/Technical Assistance/Outreach  EPA Hospital Audit Program  Pesticide Reduction and Healthy Lawns  Support School Chemical Cleanouts  Work with State Sustainability Council	<ul> <li>Review, approve and monitor 6 municipal waste combustor mercury material separation plans –</li> <li>Complete Hospital PPIS final report and develop/post 2 case studies</li> <li>Hold 8 Pesticide Reduction Wkshops for up to 20 communities.</li> <li>Award grant to 4 communities for school chemical cleanouts and management.</li> <li>Participate in implementation plan development for State Sustainability – Toxics.</li> </ul>
		<ul> <li>Solid Waste Diversion: Basic Program Infrastructure Grants/Loans/Technical Assistance/Outreach</li> <li>Bottle Bill Oversight/Registration/Grants</li> <li>Business Recycling Assistance – support WasteCap ongoing business assistance</li> <li>Buy Recycled/Market Development Support – Assist in Buy Recycled/EPP Vendor Fair, serve as clearinghouse for information and support requests</li> <li>DARP Oversight</li> <li>Municipal Recycling Grants – Equipment and Education continue to provide grants to support new and expanded municipal waste reduction initiatives</li> <li>Promote Product Stewardship: Carpet, Electronics, and Paint</li> <li>Regional Recycling Coordination/Technical Assistance with municipal officials</li> <li>Surplus Property Reuse and Distribution: Coordinate and document municipal exchanges</li> <li>School Recycling Programs/Green Team</li> </ul>	<ul> <li>Award \$1.375 M in redemption center grants</li> <li>Register Redemption Centers twice.</li> <li>Collaborate with WasteCap on providing technical assistance to businesses - ongoing.</li> <li>Hold 6 workshops at EPP Vendor Fair. Serve on organization comm.</li> <li>Begin strategizing and holding meetings on DARP post 2005.</li> <li>Award grants to 50 communities for recycling equipment and education totaling approximately \$200,000.</li> <li>Sign Product Stewardship Agreement on Paint.</li> <li>Increase Surplus Property Reuse and distribution by 25%. Document all matches.</li> <li>Initiate Carpet workgroup to develop diversion strategy</li> </ul>
		Sustainability Program Development and Evaluation  • Sustainability Council Participation Grants/Loans/Technical Assistance/Outreach  • Web Page Development to support key initiatives	Develop and implement work plan for the Waste Reduction component of the State Sustainability Plan     Attend monthly SSC Meetings

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
Toxics Management and Reduction – TURA Program  (NOTE: This is a multi media program equally relevant to Air and Industrial Wastewater Goals)		Reporting  TURA Annual Report collection, management, review and analysis  Tier 2 Right to Know reporting assistance to regulated community  Public Information  TURA Progress Assessment: Prepare Annual TURA Data Release and Report to Legislature  Program Development and Evaluation  Develop TURA Redesign Legislation with TURA Partners (secretary's priority)  Coordination with external "TURA Partners"  Toxics Use Reduction Regulatory Package: Streamlining regulations  Permitting  Issue Toxics Use Reduction Planner Certifications  Fees  Issue Toxics Use Reduction Bills for 2004  Data Systems Development  TURA eDEP – Improve filing forms to increase percentage of companies filing electronically  Compliance and Enforcement  TURA Annual Report collection, management, compliance and enforcement and analysis  Inspect Large Quantity Toxics Users and take appropriate follow up enforcement	<ul> <li>Manage reports from 620 Large Quantity Toxics Users</li> <li>Issue annual TURA Data Release and Report to legislature by July 2005</li> <li>Issue 90 Toxics Use Reduction Planner Certifications</li> <li>Issue \$4.1 million of TURA bills to approximately 620 facilities</li> </ul>
Beyond ERP (Note: The program innovation is equally relevant to air & industrial wastewater goals)  Apply ERP techniques to a broad portion of the regulated universe ie.:  • Establish performance targets		<ul> <li>Continued Assessment and program oversight streamlining on six sectors: solid waste transfer stations, Biotech facilities, small engines and turbines (distributed generators), mercury discharges from dental offices, stage II gasoline facilities, and photo processors. These projects are being done as part of a "design/build strategy" to help inform the overall design of the Beyond ERP initiative.</li> <li>Assessment and program oversight of new sectors for FFY05: Illegal dischargers to drinking water protection areas, closed landfills, soils processors, asbestos, and other targets to be identified</li> </ul>	

<b>Key Strategies</b>	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
<ul> <li>Evaluate performance against those targets</li> <li>Streamline oversight if performance is adequate, and</li> <li>Additional measures if performance is below target</li> </ul>		<ul> <li>Implementation of new oversight strategy that provides routine field oversight to "most risky" facilities, and report review and appropriate enforcement response to other sources</li> <li>Development and implementation of new inspection types to be used in assessment and to broaden our field presence</li> </ul>	
Proper Operation of Solid Waste Management Facilities		<ul> <li>Compliance and Enforcement</li> <li>Beyond ERP: HIHV project: Inactive Landfill Assessment</li> <li>Review groundwater monitoring reports from solid waste management facilities and take appropriate follow up action</li> <li>Review financial assurance reports from solid waste management facilities and take appropriate follow up action</li> <li>Conduct inspections and follow up enforcement at solid waste management facilities</li> <li>Program Development and Evaluation</li> <li>Beyond ERP: Petroleum Contaminated Soils Processors Project</li> <li>Evaluate asbestos management at SW processing facilities</li> <li>Beyond ERP: Asbestos Targeted Group and HIHV: Asbestos in soils regulations</li> <li>Beyond ERP: Transfer Station Project: Alternative Penalty Policy</li> <li>Beyond ERP: Transfer Station Project: Certification Regulations</li> <li>Regulation, Policy and Guidance Development for Solid Waste (non Beyond ERP): Facility, Beneficial Use Determinations, Facility Based Impact Assessments, Waste Bans, Master Plan Implementation, H2S Action Level, Municipal Ferrous Policy</li> <li>Regulation, Policy, and Guidance Development for Solid Waste (non Beyond ERP): guidance for assessing groundwater contamination at landfills and siting new landfill capacity in water quality sensitive areas</li> <li>Work with the external Solid Waste Advisory Committee and Subcommittees</li> </ul>	<ul> <li>Conduct approximately 450 inspections at solid waste management facilities and take appropriate follow up enforcement</li> <li>Work on over 200 active solid waste facility permit and plan approval applications, and beneficial use determinations</li> <li>Promulgate Solid Waste facility regulations and develop related guidance by winter 04-05</li> <li>Manage over 1000 reports from solid waste facilities</li> </ul>

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
RCRA  Joint effort to streamline the RCRA Authorization process		Permitting Issue state-wide Solid Waste Beneficial Use Determination Permits for waste reuse activities Issue permits for solid waste management facility development and expansion  Program Development and Evaluation Participate in the ECOS Project - Functional Equivalence Workgroup designed to provide states with flexibility in the implementation of Federal hazardous waste management requirements (Commissioner Office priority) Beyond ERP: Biotech Project: develop DEP satellite accumulation regulations and hazardous waste waiver regulations Develop Hazardous Waste Resource Conservation and	<ul> <li>Develop Satellite accumulation policy by October 04</li> <li>Authorization streamlining pilot chosen by February 2005</li> <li>Final regs, AG statement, PD and MOU submitted to EPA by 3/30/07</li> <li>Impasse on national Functional Equivalence Workgroup product resolved by Spring 2005</li> </ul>
		Recovery Act Authorization Regulations Develop a plan for making progress on Federally mandated RCRA reauthorization - C-4 to C-9  Evaluate EPA Project XL Laboratory Project which provides universities with temporary variances from certain hazardous waste management regulations to determine if the project should be continued, per EPA grant commitment  Serve on the Board of Directors of the Northeast Waste Management Organization Association to promote interstate cooperation/ coordination  Work with the external Hazardous Waste Advisory Committee  Verify permit renewal baseline established by EPA NE  Draft 310 CMR 21( c ) regulations necessary to be authorized for RCRA Corrective Action  Permitting  Permitting: Issue TSDF Licenses, Transporter Licenses, Emergency Treatment approvals, Hazardous Waste Treatability Studies, and Transporter Vehicle Identification Numbers  Perform Hazardous Waste Facility Siting Determinations Under MGL C21D (if needed)  Reporting  Process Hazardous Waste Manifests	<ul> <li>Final national Functional         Equivalence Workgroup product         issued as guidance by Summer 2005</li> <li>Permit renewal baseline set by end of         FY05</li> <li>DEP runs successful translations in         the EPA test environment</li> <li>DEP final decision to move         translated data into production</li> <li>DEP runs a full-replace translation         from EPICS into the production         RCRA Info handler module two         months after EPA HQ has translation         software in place.</li> <li>Develop plan for RCRA         reauthorization progress by         September 30, 2005</li> <li>Issue 4 TSDF Licenses, 30         Transporter Licenses, 10 Emergency         Treatment approvals and 1000s of         Transporter Vehicle Identification         Numbers</li> <li>Process 350,000 hazardous waste         manifests</li> </ul>

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
		<ul> <li>Manage routine regulatory reporting requirements and associated data systems development &amp; management activities for electronic monthly operating report from hazardous waste transporters</li> <li>Manage routine regulatory reporting requirements and associated data systems development &amp; management activities for hazardous waste biennial report and RCRIS and submit compliance and enforcement reports to EPA</li> <li>Compliance and Enforcement</li> <li>Take enforcement for hazardous waste related and Land Disposal Facility reporting violations</li> <li>Perform compliance monitoring, report review, inspections and enforcement for hazardous waste transporters</li> <li>Perform groundwater assessment monitoring at hazardous waste and solid waste facilities</li> <li>Review financial assurance reports from hazardous waste management facilities and take appropriate response</li> <li>Inspect and take appropriate enforcement actions at hazardous waste generators, offsite hazardous waste recyclers, and Treatment Storage and Disposal Facilities</li> <li>Data Systems Development</li> <li>Systems Development: CDX Network readiness grant - RCRA redesign, EPICS integration, testing, data transfer protocols to EPA</li> <li>Fees</li> <li>Support Hazardous Waste Manifest and Cost Recovery Operations with BWSC</li> </ul>	<ul> <li>Manage 1560 + hazardous waste transporter monthly operating reports</li> <li>Inspect approximately 100_ large quantity hazardous waste generators and take appropriate follow up enforcement</li> <li>Inspect several hundred small quantity hazardous waste generators and take appropriate follow up enforcement</li> <li>Inspect all 13 treatment, storage and disposal facilities and take appropriate follow up enforcement</li> <li>Inspect 25 commercial offsite recyclers and take appropriate follow up enforcement</li> <li>Review several hundred reports from hazardous waste management facilities</li> </ul>
Oversee Cleanups at		Program Development and Evaluation	
RCRA Corrective Action Sites	Work with DEP in meeting the Environmental Indicators (EI) at the remaining Government Performance Results Act (GPRA) sites and in developing a schedule for achieving Remedy Decisions and Construction Completions at all sites subject to RCRA Corrective Action	<ul> <li>Regulation, Policy and Guidance Development for Hazardous Waste (non Beyond ERP): Federally Corrective Action authorization work</li> <li>Permitting</li> <li>Perform closure activities at hazardous waste facilities as required and evaluate Resource Conservation and Recovery Act Environmental Indicators</li> <li>RCRA Corrective Action</li> </ul>	• Final regulations, Attorney General Statement and Memorandum of Understanding submitted to EPA by 3/30/07
	Work with DEP in making Remedy Decisions and Construction	As a one-time commitment, DEP has agreed to the following site-specific goals in the 2004-206 PPA in order that EPA	Meet the Human Exposure EI's and complete the human exposure

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
	Completions at sites subject to RCRA Corrective Action  Work with DEP in updating the RCRA database for Corrective Action activities  Conduct RCRA corrective action at several EPA lead sites in order to meet the EI's (Zeneca, Englehard, Clean Harbors Braintree, Columbia Mfg.).	Region I can make required commitments to meet its GPRA goals. This is a level of specificity that DEP does not believe should be incorporated into the PPA. It must also be noted that these are site-specific goals. There is some uncertainty about what will be found at these sites as clean-up activities proceed. Completion dates might need to be revisited if site conditions mean the timelines must be extended.  • Complete the human exposure EI checklists for the state lead 2005 GPRA sites  • Complete all activities necessary to meet the Human Exposure indicator at the Wyman Gordon site by 9/30/05  • Review Bostik site files and complete all activities necessary to meet the Human Exposure indicator by 9/30/05  • Work with EPA to complete the EI checklists at the Leavens Awards and Walton & Lonsbury sites by 9/30/05  • Coordinate with EPA in making remedy decisions and remedy construction completions for sites on the new 2008 GPRA Baseline  • Provide assistance to EPA in updating the RCRA database for Corrective Action activities and in obtaining documents at sites subject to RCRA Corrective Action from Licensed Site Professionals.	checklists for all remaining 2005 GPRA Baseline sites by September 30, 2005 (this excludes the GE Pittsfield site)
Industrial Wastewater		<ul> <li>Program Development and Evaluation</li> <li>Beyond ERP: Biotech Project: IWW Certified Operator Regulations and Permit Standards</li> <li>Beyond ERP: Dental Mercury Project: Development</li> <li>Beyond ERP: Illegal Discharges to Drinking Water Protection Areas Targeted Group lead</li> <li>Regulation, Policy and Guidance Development for Industrial Wastewater (non Beyond ERP): BRP groundwater discharge amendments</li> <li>Reporting</li> <li>Beyond ERP: Dental Mercury: Manage the voluntary certification process</li> <li>Permitting</li> <li>Permit industrial discharges to groundwater</li> <li>Coordinate with EPA on NPDES permits</li> </ul>	

Key Strategies	2005 – 2006 Actions		
	EPA NE	MA DEP	MILESTONES
		Compliance and Enforcement     Conduct inspections and review monitoring data from industrial wastewater dischargers and take appropriate follow up enforcement	
Program Development and Support		<ul> <li>Compliance and Enforcement</li> <li>Implement municipal stewardship grant &amp; measurement program - extended 6 month for recognition program and develop plan to transition program</li> <li>Data Systems Development</li> <li>Systems Development: CDX Network readiness grant - RCRA &amp; Air Quality database work - redesign, EPICS integration, testing, data transfer protocols to EPA</li> <li>Systems Development: Single Actor Model (SAM) - EPICS Integration work w/ITO</li> <li>Systems Development: EDEP Support - Building forms, outreach to regulated community and technical support of eDEP application for all BWP forms</li> <li>Systems Development: C&amp;E Enhancement Systems work - MADOG, Citation Library, EPICS data model Changes</li> <li>Participate in Quality Management Planning work group</li> <li>Fees</li> <li>Issue Toxics Use Reduction Bills for 2004</li> <li>Data support to Annual Compliance Fee (ACF) program - cleanup/extract for bills</li> <li>Program Development and Evaluation</li> <li>Work on NEWMOA and ASTSWMO projects to facilitate interstate waste management coordination</li> <li>Implement Measures of Success Project</li> <li>Program Planning and PPA</li> <li>EPA grant commitment negotiations</li> <li>Public Information</li> <li>Track and coordinate response to Freedom of Information Requests</li> <li>Inter/intranet management, including Public Access Project</li> </ul>	

Key Strategies		2005 – 2006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
Waste Site Cleanup			
Maximize Risk Reduction  Ensure Implementation of Mandatory Risk Reduction Measures		<ul> <li>Provide technical assistance to parties proposing IRAs</li> <li>Oversee response actions in the field and mobilize state contractors where responsible parties cannot or will not respond</li> <li>Provide oral approvals of IRA Plans</li> <li>Review and approve follow-up written IRA Plans</li> <li>Perform field visits to oversee IRAs in progress</li> <li>Track progress in the database to ensure timely implementation of IRAs</li> <li>Review IRA Completion Statements</li> <li>Enforce deadlines for PRPs to perform</li> </ul>	<ul> <li>Open IRAs reviewed for CEP conditions</li> <li>Downgradient Property Status (DPS) and Utility – Related Abatement Measures (URAMs) reviewed for IRA/CEP conditions</li> <li>Enforcement actions initiated against parties found in noncompliance</li> </ul>
Oversee and Perform Emergency Response Activities		<ul> <li>work with federal, state, and local authorities to plan for and define DEP's role in any incidents involving weapons of mass destruction.</li> <li>Coordinate with the Coast Guard when oil or hazardous material is released to the ocean, and act as the State On-Scene Coordinator (SOSC) in the Incident Command System (ICS).</li> <li>Respond to fish kills, in accordance with an inter-agency MOU with the Department of Fish and Game</li> <li>Respond to releases on state highways, in accordance with an MOU with the MA Highway Department</li> <li>Coordinate with the MA Department of Public Health in responding to releases of medical waste to the environment</li> <li>Respond with the Department of Fire Services Regional HazMat teams and coordinate remediation of hazmat incidents</li> </ul>	
Address Serious Risks Using Public Funds with State Contractors		Conduct time-critical assessment and remediation activities (such as residential indoor air evaluation, emergency water supply) to	Implements the Urban     NORA/Lien Enforcement     Project

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies		2005 – 2006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
		<ul> <li>address risks to sensitive receptors in cases where there is no known, willing, or able PRP</li> <li>Investigate potential sources of contamination and conduct targeted remediation to protect municipal water supplies in various communities</li> </ul>	<ul> <li>Investigate the sources of perchlorate contamination in surface water and public and private drinking water wells</li> <li>Recover, to the maximum extent possible, the costs incurred by DEP in performing publicly funded risk reduction actions</li> </ul>
Triage		<ul> <li>Screen response action submittals and identify IRA, risk reduction, and enforcement needs and opportunities</li> <li>Refine triage process, criteria, and forms as needed to reflect and better support program operations in the face of significant staffing reductions</li> <li>Ensure appropriate level of IRA and other follow-up at those sites where risk and/or enforcement concerns are greatest</li> </ul>	<ul> <li>Refine triage process, criteria, and forms as needed to reflect and better support program operations in the face of significant staffing reductions</li> <li>Ensure appropriate level of IRA and other follow-up at those sites where risk and/or enforcement concerns are greatest</li> </ul>
Provide Direct Oversight of Response Actions at the Most Complex Sites		<ul> <li>Identify sites (through triage and other means) that pose the most concern with respect to complexities and/or risks to health, safety, public welfare, or the environment</li> <li>Identify specific IRA conditions and/or contaminant transport/exposure pathways where direct DEP oversight is necessary to ensure adequate short and/or long-term progress and resolutions (such as sites posing threats to public drinking water supplies)</li> <li>Articulate specific objectives and parameters of DEP oversight, and assign staff accordingly</li> </ul>	availability, and oversight needs at other sites
Increase Rate of Cleanups at Waste Sites  Enforce Against Parties Not Performing Cleanups		<ul> <li>Enforce against parties who fail to notify DEP of releases as required by the MCP</li> <li>Issue anniversary reminder letters</li> <li>Strive to ensure first year preliminary response action compliance</li> <li>Issue Notices of Noncompliance and Interim</li> </ul>	<ul> <li>Send NONs to PRPs who fail to Tier Classify or conduct phase work</li> <li>Send NONs to PRPs whose Tier I permits and Tier II classifications have expired</li> </ul>

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies		2005 – 2006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
		Deadline letters  Issue penalties and unilateral orders  Negotiate Administrative Consent Orders  Identify sites without viable PRPs and develop case-specific strategies to address them  Identify recalcitrant PRPs and develop case-specific strategies to address them	<ul> <li>Send NONs to PRPs who sites are in Phase V or ROS if the systems are not operating properly or being monitored</li> <li>Implement the Urban NORA/Lien Enforcement Project</li> <li>Work with DFS to address abandoned USTs</li> </ul>
Streamline and Maintain Compliance Tracking Systems		<ul> <li>Create records in the Waste Site Cleanup (WSC) database after receiving notice of a release or threat of release</li> <li>Enter information from transmittal forms into the WSC database as reports are received</li> <li>Enter information into the WSC database summarizing DEP-issued correspondence</li> <li>Perform queries to evaluate the status and history of submittals at individual sites or categories of sites, and to generate compliance reports for targeted enforcement</li> <li>Automate the generation of NONs</li> <li>Develop analysis tools to improve evaluation of deadline compliance</li> <li>Revise BWSC transmittal forms as needed</li> <li>Increase use of online transmittal forms with incentives and outreach to LSPs and PRPs</li> <li>Improve user interface of WSC database by staff, both in the field and in the office</li> </ul>	Automate the generation of NONs     Increase use of online transmittal forms with incentives and outreach to LSPs and PRPs
Encourage Deadline Compliance by Collecting Annual Compliance Fees		<ul> <li>Continue to review and invoice fixed Annual Compliance Fees</li> <li>Continue to streamline billing procedures</li> </ul>	
Ensure the Quality of Cleanups at Waste Sites Maintain Compliance Checks/ Inspections for Privatized Cleanups		<ul> <li>Conduct site audits as required by law:</li> <li>Level 1 audits (submittal screening)</li> <li>Level 2 audits (field inspections to ensure that IRAs, RAMs, Remedy Operation Status, and AUL Obligation and Maintenance conditions are implemented)</li> </ul>	<ul> <li>Audit all sites at which AUL's are implemented</li> <li>Publish audit findings in LSPA newsletter</li> <li>Conduct a LSP training on audit case studies</li> </ul>

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 20	06 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
Conduct Enforcement to Address Noncompliance with MCP Performance Standards		<ul> <li>Review response actions to evaluate quality</li> <li>Conduct comprehensive compliance reviews</li> <li>Issue NONs or higher level enforcement to PRPs who violate the MCP requirements</li> <li>Refer LSPs whose opinions persistently or egregiously violate MCP standards to the LSP Board for disciplinary investigation</li> <li>Issue NONs or higher level enforcement against LSPs or consulting firms who perform work that persistently or egregiously violates MCP standards</li> <li>Refer cases to the AG for civil or criminal enforcement</li> <li>Provide technical support and/or testimony in support of LSP Board disciplinary investigations and AG enforcement actions</li> </ul>	<ul> <li>Review LSP performance patters during audits</li> <li>Conduct stings</li> </ul>
Ensure that Policies and Regulations Promote Program Goals		<ul> <li>Issue Wave 2 public hearing draft</li> <li>Finalize data enhancement program</li> <li>Issue Q&amp;As</li> <li>Issue draft policy on feasibility evaluations for         <ul> <li>Critical Exposure Pathways</li> <li>Permanent vs. Temporary Solutions</li> <li>Selection of Remedial Action Alternatives</li> <li>Reducing/Detoxifying OHM Present at a Site Above UCLs</li> <li>Destruction/Detoxification vs. Capping</li> </ul> </li> <li>Issue final Monitored Natural Attentuation guidance</li> <li>Issue final asbestos-in-soil policy</li> </ul>	<ul> <li>Release draft 9/20/2004</li> <li>Finalize 9/10/2004</li> <li>Issue periodically</li> <li>Issue draft February 2004</li> <li>Issue February 2005</li> </ul>
Provide Direct Oversight for Federal Sites  National Priorities List	Provide MA DEP funding under a Superfund Block Funding Cooperative Agreement (V99174203) which includes supporting National Priority List (NPL) activities for 35 NPL sites and core activities for eligible non-site specific work. In general, this grant covers MA DEP personnel time and some state contractual work in support of EPA NPL program.		

Key Strategies	2005 – 2006 Actions		MA DEP Outputs
	EPA NE	MA DEP	Milestone
National Priorities List	Work with the state on a range of site clean up related activities including: review, comment, and concurrence on all major documents, participation in public meetings, state contractor oversight, identification of state ARARs, and timely communication of issues and concerns. Work with MA DEP to submit (Under the Superfund Regulation, 40 CFR Part 35 Subpart O), Quarterly Progress Reports, Financial Status Reports, MBE/WBE Reports, and Property Inventory Reports, if applicable.		
	Work with DEP on Institutional Controls – an area of renewed emphasis – to evaluate and resolve overarching issues impacting numerous sites		
National Priorities List	Atlas Tack site:     Continue Remedial Action, begin additional phases of remedial action as funding allows		
	Baird and McGuire site:     Obtain DEP review and concurrence of an Explanation of Significant Differences and begin cooperative effort on Institutional Controls concurrence of a Five-Year review	Baird and McGuire site:	
	Blackburn & Union Privileges site:     Complete Remedial Investigation/Feasibility     Study, issue proposed plan and Record of     Decision for cleanup (Alternate EPA Target)		
	Cannons (Bridgewater) site:  • Complete five-year review of remedy with DEP input		
	<ul><li>Charles George site:</li><li>Complete five-year review of remedy with DEP input</li></ul>		
	<ul> <li>General Electric</li> <li>The Consent Decree crated a "management architecture" which includes periodic meetings of the Regional Administrator, MA DEP Commissioner, Mayor of Pittsfield,</li> </ul>		

Key Strategies	2005 – 2006 Actions		MA DEP Outputs
	EPA NE	MA DEP	Milestone
	Director of the Pittsfield Economic Development Authority and GE's VP in		
	charge of Corporate Environmental Affairs.  These meetings occur about 3 times per year.  EPA will work with DEP on another part of		
	the consent decree where dozens of environmental restrictions are required to be		
	placed on properties. DEP must be involved in the negotiation process in order to ensure		
	that the final restrictions are acceptable to DEP who will be the grantor of the restrictions.		
	Groveland Wells site:		
	<ul> <li>Continue operation of groundwater remedy</li> <li>Evaluate additional source control options, implement recommendations of remedy optimization review with DEP input</li> </ul>		
	Complete five-year review of remedy with DEP input		
	<ul> <li>Hatheway &amp; Patterson site:</li> <li>Complete Remedial Investigation/Feasibility Study, issue proposed plan and Record of</li> </ul>		
	Decision for cleanup. Obtain DEP review and concurrency on ROD		
	Haverhill Landfill site;	Haverhill Landfill site;	
	<ul> <li>Continue coordination with DEP on PRP's drum removal and investigation activities</li> </ul>	Work with the PRP's to remove or secure buried drums	
	<ul><li>Hocomonco Pond site:</li><li>Work with DEP and PRP on DNAPL recovery issues</li></ul>		
	Industri-Plex site:	Industri-Plex site:	
	<ul> <li>Work with DEP and PRP's to complete and implement institutional controls</li> <li>Conduct Feasibility Study (in conjunction with Wells G&amp;H site), issue proposed plan and Record of Decision for cleanup (alternate EPA target)</li> </ul>	Work with EPA and the PRPs to complete and implement institutional controls	

Key Strategies	2005 – 20	006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
	Iron Horse Park site:  • Begin negotiations with PRPs for Remedial Design/Remedial Action		
	New Bedford harbor site:  Continue Remedial Action – dredging and disposal of dredge materials  Complete five-year review of remedy with DEP input	New Bedford Harbor site:  • Serve on the Portsfields Steering Committee to coordinate redevelopment of the port area	
	Norwood PCB site:  Obtain DEP review and concurrence of an Explanation of Significant Differences, a Superfund Reuse Assessment and a five-year review  Work with DEP and landowners to complete and implement institutional controls  Finalize PRP's Operation and Maintenance Plan, complete Remedial Action	Norwood PCB site:  • Work with property owner and developers to ensure work is conducted in a manner that maintains the protectiveness of the remedy	
	Nyanza site:  Evaluate options to address groundwater (OU2), propose ROD Amendment, if necessary  Coninue Remedial Investigations/Feasibility		
	Study on Sudbury River (OU4)		
	PSC Resources site:  • Complete five-year review of remedy with DEP input		
	Plymouth Harbor site:  • Release complete Reuse Assessment, work with landowner if redevelopment proposals are received		
	ReSolve site:  • Continue oversight of PRP operation and maintenance and monitoring program		
	Rose Disposal Pit site:  • Work with DEP and PRP on institutional controls issues		
	Silresim site:  • Continue operation of groundwater remedy	Silresim site: Work with EPA to develop an acceptable long-	

Key Strategies	2005 – 20	006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
	<ul><li>Complete consolidation of off-property soils</li><li>Begin design work on site cap</li></ul>	term solution	
	Shpack site:  • Begin negotiations with PRPs for Remedial Design/Remedial Action	Shpack site:  • Work with EPA and the PRPs to develop an acceptable remedial solution	
	Starmet site:	Starmet site:  • Complete the agreement with the Army and implement drum removal	
	<ul> <li>Continue cleanup using innovative technology (UV Oxidation)</li> <li>Sutton Brook Disposal Area site:</li> <li>Continue oversight of PRP Remedial</li> </ul>		
	<ul> <li>Investigation/Feasibility Study</li> <li>Wells G&amp;H site:         <ul> <li>Conduct Feasibility Study (in conjunction with Industriplex site) for Operable Unit 3, issue proposed plan and Record of Decision for cleanup (alternate EPA target)</li> </ul> </li> </ul>		
	<ul> <li>W. R. Grace site:</li> <li>Complete Remedial Investigation/Feasibility study, issue proposed plan and Record of Decision for cleanup. Obtain DEP review and concurrence on ROD</li> </ul>		
		Continue work with EPA at numerous other sites	
Federal Facilities	<ul> <li>Army Materials Technical Laboratory</li> <li>Work with DEP to obtain concurrence on the Charles River Operable Unit Record of Decision</li> </ul>		
	<ul> <li>Fort Devens:</li> <li>Work to obtain DEP review and concurrence of a Record of Decision</li> <li>Work with DEP to ensure that the Army completes PA/SI work at the Grant Road</li> </ul>		

Key Strategies	2005 – 20	06 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
	<ul> <li>Housing Area</li> <li>Work with DEP to resolve groundwater and capping issues related to Shepley's Hill Landfill</li> </ul>		
	<ul> <li>Hanscom Air Force Base:</li> <li>Obtain DEP review and concurrence of a Record of Decision</li> <li>Continue cleanup using innovative technology (Bioremediation/Oxidation</li> </ul>		
		<ul> <li>Naval Weapons Industrial Reserve Plant:</li> <li>Work with the Navy on the early Covenant Deferral Request</li> <li>Continue work with EPA and DoD at numerous other sites</li> <li>Develop and submit Defense/State Memorandum of Agreement Cooperative Agreement for new funding for oversight activities</li> <li>Complete the final phase of the FUDs pilot project with the Department of the Army; evaluate possible additional activities for joint effort</li> </ul>	
	<ul> <li>South Weymouth Naval Air Station:         <ul> <li>Assuming negotiations get back on track during FY 0f, EPA will work with DEP to secure the Governor's concurrence on the Covenant Deferral Request (CDR) package. Concurrent activities under the MA MEPA certificate on the development side include the smart growth effort that EPA supports</li> <li>EPA will work with DEP to ensure that the Navy restarts work that had been slowed by the previous negotiation effort</li> <li>Work to obtain DEP review and concurrence of one Record of Decision</li> </ul> </li> </ul>	South Weymouth Naval Air Station:  • Complete agreements necessary for early transfer of and transfer/privatization of cleanup activities	
_		Continue work with EPA at numerous other federal facilities	

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2	006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
Multi-Site Cooperative Agreement	Work with DEP through Superfund Pre- Remedial Cooperative Agreement (V98116401)	<ul> <li>Make recommendations regarding Eligible Response Site Status for sites on CERCLIS</li> <li>Evaluate sites for listing on CERCLIS</li> <li>Evaluate sites for recommendation to NPL</li> <li>Evaluate sites on CERCLIS for federal vs. state lead, and for removal from CERCLIS</li> <li>Work with EPA on removal actions for time-critical projects</li> </ul>	
Massachusetts Military Reservation: Perchlorate in Groundwater	EPA continues with remedy selections and design/construction on the Superfund ground water plumes. One of the main issues on the Impact Area is the perchlorate level to be used to guide the investigation and cleanup.  EPA supports MA DEP efforts at promulgating a perchlorate standard.	Conduct the following work in connection with the investigation and remediation being conducted at the MMR by the Army and managed by the Army Environmental Center (AEC)  Establish Perchlorate MCL for drinking water  Review and update Massachusetts standards as needed when EPA standards are established 2006-08.  Develop regulatory guidance, standards, and policies relating to management of perchlorate.  Reviews and provide comments and recommendations on documents or data submitted to DEP  Identify, evaluate, and explain MCP requirements related to response actions  Execute site visits and participate in activities subject to public involvement requirements, including participation in Technical Review  Committee (i.e., IART)	Issue MCP regulation revisions package and promulgate regulations in 2004/2005
Massachusetts Military Reservation: Impact Area Groundwater Study (IAGS)	EPA continues with investigations, remedy selections and design/construction on the Impact Area ground water plumes and source areas.  Work with DEP to obtain concurrence on the Demo 1 groundwater cleanup decision	<ul> <li>Committee (i.e., IART)</li> <li>Conduct the following work in connection with the investigation and remediation being conducted at the MMR by the Army and managed by the Army Environmental Center (AEC)</li> <li>Develop regulatory guidance, standards, and policies relating to management of Impact Arearelated hazardous materials (e.g., HMX, RDX) that do not currently have state or federal drinking water or cleanup standards</li> <li>Execute technical reviews and provide comments and recommendations on documents</li> </ul>	Issue MCP regulation revisions package and promulgate regulations in 2004/2005

Key Strategies	2005 – 2	2006 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
Leaking Underground Storage	Continue cleanup using innovative technology (Recirculation wells)	or data submitted to DEP  Identify, evaluate, and explain MCP requirements related to response actions  Execute site visits and participate in activities subject to public involvement requirements, including participation in Technical Review  Prepare and administer related agreements including reimbursement of costs associated with obtaining and analyzing split samples  Review and inspect operations and maintenance of remedial response systems  Attend staff meetings and conferences in support of the IAGS program.  Provide regulatory oversight in close coordination with EPA (state serves as a concurring agency) in support of the MMR Installation Restoration Program (IRP) managed by the Air Force Center for Environmental Excellence  Complete Winton's Food & Fuel (Palmer) Pay-	
Tanks (LUST)		<ul> <li>Complete without's Food &amp; Fuel (Faither) Payfor-Performance remedial project</li> <li>Implement LUST Cooperative Agreement Work Plan</li> </ul>	
Participate with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO)		<ul> <li>Serve as chair of the State/EPA Superfund Task Force Working with EPA and states on issues related to Superfund</li> <li>Serve as chair of the Sediments Task Force working with EPA and states on issues related to evaluating and remediating contaminated sediments</li> <li>Serve on the State Response and Brownfields Programs Operations Task Force working with EPA and the states on issues related primarily to Brownfields programs and implementing the new Brownfields Law</li> <li>Serve on the Federal Facilities Training and Technology Transfer (T3) Focus Group tasked</li> </ul>	

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 20	06 Actions	MA DEP Outputs
	EPA NE	MA DEP	Milestone
		with improving partnership between state and federal agencies and producing issue papers to promote state interests on issues affecting environmental restoration at federal facilities  • Serve on the Federal Facilities DSMOA Task Force working with DoD and the states on issues related to federal facilities	
Participate with the New England Waste Management Officials Association (NEWMOA)		Continue to work with EPA and the other New England states on issues common to the region, including brownfields, institutional controls, and improving the quality of site characterization	
Assist in Enhancing Homeland Security  Participate in Planning, Preparedness and Response with Other State and Federal Agencies		<ul> <li>Interface and coordinate planning and preparedness on Homeland Security matters with the US EPA, the Region I Regional Response Team (RRT), the US Department of Homeland Security, the Massachusetts National Guard Civilian Support Team (CST), the US Coast Guard (Providence and Boston), MEMA, the Massachusetts Department of Fire Services and its District Hazardous Material Response Teams, and other appropriate federal, military, state, and local authorities</li> <li>Provide field and technical support during Homeland Security incidents focusing on identifying and protecting environmental receptors and managing decontamination and other waste materials</li> </ul>	
Facilitate Restoration and Redevelopment of Brownfields Properties  Coordinate, facilitate, provide technical assistance and on-site coordination for Brownfields Redevelopment	Provide new grants to:  Attleboro Berkshire Regional Planning Commission Boston Franklin Regional Council of Governments Montachusett Regional Planning Commission Norfolk County Pioneer Valley Regional Planning Commission	<ul> <li>Promote and assist in the use of the Special Project Designation (SPD), a tool that provides increased flexibility on cleanup deadlines for certain types of projects</li> <li>Work with EOEA to implement the Environmental Justice Policy</li> <li>Hold bi-monthly meetings with regional coordinators</li> </ul>	Implement Urban Area Compliance Assurance  Conduct state-funded investigations/risk reduction activities at EPEA-designated

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		MA DEP Outputs
	EPA NE	MA DEP	Milestone
	Boston Redevelopment Authority Brockton Greenfield Marlborough Mystic valley Development Commission New Bedford	<ul> <li>Generate 12 monthly reports for the Commissioner</li> <li>Provide technical outreach to project proponents on regulatory issues, and promote the use of financial and liability incentives</li> <li>Lead monthly partner meetings with state and federal staff monthly</li> <li>Continue to track DEP brownfields involvement using time codes and other tools</li> <li>Provide letters of support to entities applying for EPA brownfields grant funding</li> <li>Conduct four EPA funded brownfields site assessments using state contractors</li> <li>Work with state partners toward developing an inventory of brownfields sites</li> <li>Provide assistance to communities receiving cleanup grant funding through the EPA CleanupGrant Program</li> <li>Continue to provide assistance to communities that have received funding through theBrownfields Cleanup Revolving Loan Fund Program.</li> <li>Provide support to the Office of Commonwealth Development and the Executive Office of Environmental Affairs on Brownfields Policy development and Transit-Oriented Development (TOD) discussions.</li> </ul>	municipally owned sites  Assist Deputy Commissioner in planning/implementing the Brownfields Roundtable
		<ul> <li>Participate on the review panel for the Brownfields Redevelopment Access to Capital Program</li> <li>Promote the redevelopment of priority lien sites</li> <li>Conduct pre-permit meetings in regions for brownfields project proponents as needed</li> <li>Organize and speak at public outreach forums</li> </ul>	<ul> <li>Target proactive outreach to 15 municipalities</li> <li>Assist the AGO in reviewing 15 Covenant Not to Sue applications</li> <li>Implement up to 10 brownfields site assessments</li> <li>Work with state partners toward developing an inventory of brownfields sites</li> </ul>

**Goal 3: Manage Wastes and Clean Up Waste Sites** 

Key Strategies	2005 – 2006 Actions		MA DEP Outputs
	EPA NE	MA DEP	Milestone
Implement Brownfields Cooperative Agreement	<ul> <li>Provide DEP with \$1,368,049 in funding from the Brownfields Program through a Brownfields State Response Program Cooperative Agreement issued under the new Brownfields law, (CERCLA, Section 128(a)).</li> <li>Using this funding, MA DEP will:         <ul> <li>Develop program guidance to address: asbestos in soil, monitored natural attenuation, risk assessment short forms for contamination.</li> </ul> </li> </ul>	<ul> <li>Enhance the state's oversight and enforcement capabilities by implementing the eGov Project, implementing procedures to prioritize auditing and enforcement; reviewing LSP performance records, reviewing site audits, implement plans to address the "Non-responders"</li> <li>Enhance public record of sites, as necessary, to ensure it meets requirements for continued funding</li> <li>Perform Site Manager role for municipalities that need assistance implementing Brownfields Revolving Fund Loan and Brownfields Cleanup Grant projects</li> </ul>	<ul> <li>Implement 3 – 4 Brownfields         Site Assessments (expected to         include sites in Amesbury,         Whitman, and Ashland</li> <li>Begin surveying and         inventorying Massachusetts         brownfields sites</li> </ul>
Superfund Pre-remedial	Work with DEP through Superfund Pre- Remedial Cooperative Agreement (V98116401) that also includes Brownfield Site Assessment activities (the BSA portion of this cooperative agreement is a continuation of the activities funded under Superfund - prior to the new Brownfields authorization)     Assist DEP in reviewing Eligible Response Site List and providing feedback on EPA's proposed sites to be excluded from the enforcement bar provision in the new Brownfields legislation		

# **Goal 4: Healthy Communities - Environmental Justice Initiatives**

#### **Massachusetts Status**

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including any racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policy.

In October 2002, the Executive Office of Environmental Affairs adopted an Environmental Justice Policy that, in part, charged the Department with making environmental justice (EJ) a priority in planning and implementing its programs. The policy designated certain census blocks as EJ Population area based on the demographic character of the residents. Although the delineation of an EJ Population area is relatively new, the Department's activities in low income and minority communities are long standing.

There are some general considerations that are important in evaluating the Department's performance in EJ communities. First, residents that live in EJ areas are often affected by environmental issues that impact a broader community or entire municipality, such as the quality of the drinking water or the performance of the waste water treatment system that discharges into the community's watershed. In other instances, facilities located outside the EJ area, such as major air sources or surface water dischargers, can have substantial impacts on neighboring communities depending on the direction the wind blows or water flows.

Examples of the Department's ongoing EJ related activities include:

<sup>1</sup> Census blocks where 25 percent or more of the residents are minorities, foreign born, or lacking English proficiency, or whose median annual household income is at or below 65% of the statewide median income.

• Clean Air regulatory actions that raised facility performance standards at power plants and municipal waste combusters,

- State Revolving Fund (SRF) grants that have funded major capital improvement to municipal water and waste water facilities,
- Solid Waste Municipal Recycling Incentive Program (MRIP) grants that have underwritten solid waste recycling/composting initiatives,
- 21E direct funding of the cleanup of contaminated sites in EJ areas,
- Initiating Liscensed Site Professional (LSP) Program reforms that accelerate the privately funded cleanup of hazardous waste sites,
- Program initiatives to reduce the use of mercury including; fever thermometer collection program, dental amalgam collection program, and an ongoing initiative to test mercury levels in freshwater fish and provide data to DPH for issuing Fish Consumption Advisories. This is a particular EJ issue because certain minority communities in Massachusetts depend of freshwater fish to supplement their diet.
- Central Artery mitigation measures and SRF Program initiatives to retrofit construction equipment and buses to reduce diesel emissions,
- Pollution prevention, recycling and compliance assistance programs for small and large business and public schools
- Environmental Results Program initiatives for printers, photoprocessors and dry cleaners to permit cleaner business operations that promote economic development, and
- Brownfields redevelopment work to bring contaminated and abandoned properties back to useful life.
- Diesel emission reduction efforts including diesel retrofit programs and an anti-idling program for school buses.

## Massachusetts DEP 2005-2006 Healthy Communities Priorities

In addition to the "air, water and waste" environmental work outlined in the three preceding goals, during the 2004-2006 planning period, the Massachusetts DEP will be undertaking a number of High Visibility/High Impact strategic initiatives that will further our goal of healthy communities, particularly environmental justice communities, throughout Massachusetts.

Specifically, the asbestos removal and disposal, diesel idling, waste-site clean-up in urban areas, abandoned tanks, and site discovery initiatives should be viewed as initiatives which will particularly benefit EJ communities.

### **Urban Area Compliance Assurance**

The environmental quality of our urban areas, particularly those that are designated as environmental justice neighborhoods, is a critical concern to DEP for several important reasons. Residents of these communities are often subjected to multiple sources of pollution that have been demonstrated, as in the case of asthma, to contribute to elevated incidence or risk of adverse health effects. Older, deteriorated housing and abandoned industrial operations are also more likely to expose neighborhood residents to asbestos and other contaminants. Urban properties that are contaminated with oil and hazardous waste often languish because of the recalcitrance of property owners or responsible parties who cannot or will not assess and clean-up the contamination. Such properties present not only health and environmental concerns, but also impede the growth of commercial and residential development.

Mitigation of urban pollution and acceleration of site clean-ups directly complements the goal of sustainable development by removing environmental quality stressors and increasing the stock of developable urban land.

With the goal of reducing air contamination levels, increasing the rate and quality of site clean-ups and supporting the development of sustainable businesses and affordable housing, the Department will use facility and site information data and GIS mapping systems in concert with inter-agency brownfield development initiatives to implement an urban enforcement strategy that will target Tier 1B/D default sites, mobile and stationary air pollution sources, and asbestos removal and renovation projects.

### Urban Non-Responder NORA/Lien Enforcement Project

This project will provide publicly funded waste site clean-up in support of enforcement effort in urban areas. Efforts will be targeted to sites that:

- Are in noncompliance because they either failed to complete preliminary assessment and tier classification or failed to perform required actions;
- Are located in an urban setting;
- The potentially responsible parties (PRP) own the property (location of the site) and appear to have the financial resources to perform response actions;
- The property value appears to exceed environmental liability;
- Are near schools, water supply Zone II's or other sensitive receptors; and
- Pose a significant threat.

**Strategy:** DEP will issue enforcement actions to the potentially responsible parties (PRPs) that will include several elements:

- 1. Issue a Notice of Response Action (NORA) establishing a date for response or penalties;
- If the PRP does not respond by compliance date of NORA or if PRP decides not to perform response actions, issue Notice of Intent to Mobilize (NOIM), establishing that DEP's contractor will be taking over, when the contractor will begin work and reiterating the PRP's liability, treble damages and the lien that will be in place on the property;
- 3. If PRP decides to undertake response actions after DEP has issued NORA/NOIM, then DEP will pursue an ACOP that includes a strict schedule, settles any outstanding costs to DEP and establishes that the PRP has the financial resources to complete the job; and
- 4. DEP Initiates Cost recovery/super lien provision.

#### **Asbestos Enforcement Initiative**

The Department's goal is to enhance and support enforcement of asbestos regulations and protection of public health through increased targeted inspections and publicizing results of inspection efforts and recent enforcement cases. Targeted inspections, resolution of selected ongoing enforcement cases, and compilation of recent enforcement actions have taken place between mid-January and the end of February 2004.

To facilitate our ability to target the most likely and significant violations and to develop the strongest deterrence message possible, the initiative includes several elements:

- <u>Bundling of Recent Asbestos Enforcement Cases</u>: Each region will review enforcement cases of the past six months and prepare summaries of significant cases that support the initiative.
- Development and Resolution of Ongoing Enforcement Cases: Each region will prepare summaries of ongoing asbestos enforcement cases, identifying cases of which enforcement actions can be completed by the spring of 2004. OEC will contact the Attorney General's Office to discuss the status of referred asbestos cases and determine what cases can be completed or referred back to DEP for potential inclusion in public information announcements.
- <u>Targeted Inspections</u>: DEP will increase asbestos inspections, targeting inspections based on the potential risk of exposure.
- Off-Hour Inspections: To increase our ability to discover violations, enforcement staff will perform inspections during weekends and evenings during the initiative.

#### Massachusetts Military Reservation: Perchlorate in Groundwater

Perchlorate is a chemical that is widely used as a component of propellants for rockets, missiles, and fireworks. It is very soluble in water and is persistent in ground and surface water for decades. Perchlorate is an endocrine disruptor. It acts on the thyroid gland to decrease essential thyroid hormone levels that are responsible for normal growth and development and to maintain metabolism. Perchlorate is present in the groundwater plume at Massachusetts Military Reservation (MMR), has impacted public and private drinking water wells in Bourne, and has the potential to impact other private and public wells in adjacent areas. Other contaminated sites may include fireworks manufacturers, former defense sites, etc.

At this time no state or federal standards exist for perchlorate. EPA's provisional reference dose and water concentrations do not take recent studies into account and may underestimate the potential health effects of drinking perchlorate-contaminated water on sensitive subpopulations.

While EPA is working to establish federal standards for perchlorate, promulgation appears to be several years away and its latest scientific

assessment is under review by the National Academy of Science. Massachusetts is developing protective standards on an accelerated schedule.

**Strategies:** The Massachusetts Contingency Plan (MCP) Fall 2004 regulation revisions package includes a recommended MA RfD and soil and groundwater cleanup standards for perchlorate. DEP will consider public comments received at public hearings before promulgating standards under the MCP. The regulatory standards will be used to define site cleanup levels.

DEP is also initiating the process to establish a Maximum Contaminant Level (MCL) for perchlorate in drinking water. DEP is following the federal process for setting drinking water standards, a process that includes information collection on perchlorate occurrence data in Massachusetts water supplies, using the MA RfD to set a Maximum Contaminant Level Goal (MCLG), and evaluating monitoring and treatment costs for affected public water supplies in setting the MCL.

### **Outputs:**

- Issue MCP regulation revisions package (Fall 2004) and promulgate regulations in Spring 2005
- Establish MCL for drinking water
- Review and update Massachusetts standards as needed when EPA standards are established 2006-08.

### **Brownfields Redevelopment**

With the privatization of the 21E Waste Site Cleanup Program in 1993, the number of site cleanups completed annually in Massachusetts increased dramatically. However, liability and financial barriers continued to discourage the redevelopment of brownfields sites. In 1998, the Governor and legislature enacted the Brownfields Act, creating financial and liability relief incentives to stimulate cleanup and redevelopment of contaminated sites. Similar incentives exist under federal law.

**Strategy:** DEP plays a proactive role in facilitating brownfields cleanup and redevelopment throughout the Commonwealth. Working with other state and Federal agencies, DEP provides assistance in identifying brownfields sites and moving them through the system to a regulatory endpoint. DEP's primary role in this partnership is to coordinate, facilitate, provide technical assistance

and on-site coordination, and act as the regulatory backstop to ensure appropriate cleanup.

#### **Outputs:**

- Promote and assist in the use of the Special Project Designation (SPD), a tool that provides increased flexibility on cleanup deadlines for certain types of projects
- Provide technical outreach to project proponents on regulatory issues, and promote the use of financial and liability incentives
- Conduct four EPA-funded brownfields site assessments using state contractors
- Work with state partners toward developing an inventory of brownfields sites
- Provide assistance to communities receiving funding through the EPA Cleanup Grant Program
- Continue to provide assistance to communities that have received funding through the Brownfields Cleanup Revolving Loan Fund Program.
- Participate on the review panel for the Brownfields Redevelopment Access to Capital Program
- Target proactive outreach to 15 municipalities
- Assist the AGO in reviewing 15 Covenant Not to Sue applications
- Promote the redevelopment of priority lien sites
- Conduct pre-permit meetings in regions for brownfields project proponents as needed
- Organize and speak at public outreach forums
- Implement up to 10 brownfields site assessments

### **License Site Professional (LSP) Enforcement**

When auditing, triaging or otherwise reviewing response action submittals or information about releases, DEP will routinely consider whether an License Site Professional (LSP) of Record should be cited for noncompliance with the MCP. Such noncompliance will most likely be observed when an Response Action Outcome (RAO) submitted by an Responsible Party (RP), Potentially Responsible Party (PRP) or Other Person (OP) is found to be invalid or DEP learns that response actions have been conducted at a contaminated property prior to submittal of a required Immediate Response Action (IRA) or Relief Abatement Measure (RAM) Plan. DEP will also

review audit and triage findings to determine if a pattern of poor performance associated with an LSP of interest represents a basis for LSP enforcement.

- An updated guidance document on LSP Enforcement will be developed. The guidance will explain when DEP may pursue enforcement against an LSP, environmental consulting firm and/or contractor for violations of the MCP as well as explain the enforcement document development and review process for such enforcement actions.
- The policy will urge that parallel enforcement be undertaken against the RP/PRP or OP, as applicable. Information that may serve as the basis for enforcement action against an LSP may come to light as the enforcement action against the LSP's client is resolved.
- Periodic enforcement actions that send the message to LSPs and RPs, PRPs and OPs and the public that DEP is serious about compliance with the MCP.

#### **EJ Area/Municipalities-Specific Initiatives**

The following waste site cleanup initiates may be targeted to EJ areas or to specific cities or towns. Upon receiving acknowledgement of the noncompliance citied and/or upon successful resolution of matters from a group of PRPs in a targeted area, a region should consider a press release that describes DEP's enforcement actions against a class of non-complier:

Downgradient Property Status (DPS) and Utility-Related Abatement Measures (URAMs) – Over the next several months, DEP will review significant and/or complicated DPS and URAM submittals focusing on conditions that may pose an IRA/CEP condition. Known or potential upgradient sources will be checked in the EPICs database. Parties who are not conducting response actions in accordance with MCP deadlines and/or have failed to conduct an IRA will be issued NONS, NORAS, RFIs, and/or penalties.

In certain cases, there may not be a known or potential source identified in EPICs. DEP will use RFIs and/or source discovery tools (such as wellpoints) to identify likely PRPs and issue NORs, NORAs, and/or other appropriate enforcement documents to get response actions

underway when upgradient sources are identified. (This work may also link to the limited site discovery described below).

**Department of Fire Service (DFS) Underground Storage Tank (UST) Project** - DEP is coordinating an effort with the Department of Fire Services, UST Compliance, to address USTs that were not removed in compliance with DFS requirements. Locations will be chosen assuming the tanks are old bare steel, single walled tanks of questionable integrity and located within sensitive and/or EJ areas. DEP will review compliance with DFS as a possible basis for issuing NORs or NORAs.

Notice of Non-Compliance (NONs): Failure to Complete Phase Work\_— In cases where a PRP has failed to complete Phase work after Tier II Classification or receipt of a Tier I Permit and/or achieve an RAO, NONs will be sent to the PRPs who have failed to complete Phases II, III, IV and/or achieve an RAO by applicable MCP deadlines. Appropriate high level enforcement actions (HLE) will follow for PRPs who fail to respond to and/or comply with NONS.

Non-Aqueous Phase Liquid (NAPL) Sites - DEP will review the compliance status of sites where the EPICs database shows release notifications under 310 CMR 40.0301(1) with a focus on potential IRA/CEP conditions. This regulation addresses releases to the environment indicated by the presence of subsurface non-aqueous phase liquid (NAPL) having a measured thickness equal to or greater than ½ inch. This condition is often discovered during a tank pull or Phase I or II site assessment. In many case, the notification is "linked" to an earlier Release Tracking Number (RTN) with proposal for "assessment only", the LSP's assumption being that the release condition will eventually be addressed through a Phase IV final remedial action plan. However, in some cases, PRPs fail to continue or conduct additional Phase work on time.

This initiative will first look at whether the NAPL condition requires a more aggressive response action, (such as an ongoing IRA condition). If an IRA is needed, NORs and/or NORAs will be issued. Following this review, parties who are not conducting response actions in

accordance with MCP guidelines will be issued NONs and/or NORAs or penalties if necessary.

### **Waste Site Clean Up Non-Responders Initiatives**

DEP will selectively target its current waste site cleanup non-responder activities to sensitive receptors, to Environmental Justice (EJ) areas and/or specific cities or towns as opportunities arise and/or as part of a coordinated statewide effort. While DEP will continue to focus on compliance assurance for parties who have completed response actions through the Audit program, certain Audit functions can be targeted in a similar manner.

Notice of Noncompliance (NON): Failure-to-Tier Classify - NONs are sent each month to those PRPs who have failed to Tier Classify a release by the one-year anniversary of release notification (on month 14). Appropriate higher level enforcement (HLE) will follow for PRPs who fail to respond to and/or comply with NONs.

**Open Immediate Response Action (IRA)** - PRPs who do not submit IRA Plans and or Status Reports will receive NONs based on EPICs reports. If compliance is not achieved by the NON deadline, depending on the potential for imminent and substantial endangerment to human health and the environment, higher level enforcement will be initiated or NORAs will be issued and a contractor will be mobilized if necessary.

Notice of Noncompliance (NON): Tier I and Tier II Permit non com/Extensions - When appropriate, Tier I Permit and Tier II Classification Extensions will be issued in the form of a NON or, when felt necessary, an administrative consent order (ACO), to establish enforceable deadlines in the Extension. The fact that an Extension is sought means that the permit/classification holder has failed to achieve a Response Action Outcome (RAO) by the deadline established in the MCP and in the initial Tier I Permit/Tier II Classification. In some cases, such permits/classification have expired without submittal of Phase reports by MCP deadlines as well.

Notice of Noncompliance (NON): Phase V Status Compliance - Phase V status applies to disposal sites where Phase IV response actions have been completed, a Response Action Outcome (RAO) has not yet been achieved and operation, maintenance and/or monitoring of the

Comprehensive Remedial Action is necessary to achieve an RAO. Phase V activities must follow an OMM plan developed as part of the Phase IV Remedy Implementation Plan at 310 CMR 40.0874(3)(d). At a minimum, information and data on operation and maintenance and/or monitoring must be submitted to BWSC every six months until an RAO is achieved. Phase V status does not effect the requirement to submit an RAO within five years of the date of Tier II Classification or the date of issuance of a Tier I Permit.

The compliance status of PRPs who claim response actions are in Phase IV will be reviewed to determine if remedial systems are operating, periodic monitoring is being conducted and/or applicable monitoring reports are being submitted to DEP.

**Inspections: Remedy Operations Status (ROS)** - ROS applies to disposal sites where a remedial system that relies on active operation and maintenance is being operated for the purpose of achieving a Permanent Solution. At any site with ROS, the deadline to achieve a Response Action Outcome within five years of the effective date of a Tier I permit or initial Tier II Classification does not apply, provided a PRP complies with the ROS maintenance requirements at 310 CMR 40.0893. These requirements include:

- o each source of oil and/or hazardous material shall be eliminated or controlled in accordance with 310 CMR 40.1003(5)
- o any substantial hazard shall be eliminated
- at a minimum, information and data on operation and maintenance and/or monitoring shall be gathered and submitted to DEP every six months in a report as described in 310 CMR 40.0892.

A person conducting response actions at a disposal site where Remedy Operation Status has been terminated is allowed two years from the date of the termination to achieve a Response Action Outcome.

The compliance status of PRPs claiming ROS will be reviewed to determine if remedial systems are operating, periodic monitoring is being conducted, and/or applicable monitoring reports are being submitted to DEP.

# **Strategic Investments and Innovation**

DEP and EPA New England recognize the need to make resource investments to develop new strategies and new ways of working to meet emerging challenges and to improve our ability to protect the environment. This includes sustaining and improving critical existing core program work as well as making investments in new strategies to address emerging challenges.

To fulfill this need, DEP and EPA will continue to promote innovation by providing the work environment, the institutional infrastructure and the resource commitments necessary to sustain innovative work and capacity building. DEP and EPA will proactively support the following key practices to create and sustain an innovative work environment:

- Encouraging staff and mangers at all levels of our agencies to adopt a dynamic problem solving approach that embraces non-conventional approaches for achieving environmental results;
- Fostering experimentation by expressly acknowledging that making mistakes is part of the experimentation and learning process;
- Communicating to agency staff and external stakeholders the opportunities and challenges of the agencies' innovation projects;
- Allowing sufficient time for innovations to evolve and to be appropriately evaluated;
- Placing innovative programs and projects on an equal footing with established traditional core programs; and
- Ensuring that the measures for the success of an innovation is equivalent to, and not substantially higher than, the measures for existing programs.

DEP and EPA are committed to fully integrating innovation and capacity building projects into the planning, resource allocation and evaluation processes of each agency. With respect to the planning process, the Agencies agree to the take specific actions to foster innovation, including:

- Actively seek potential innovation projects and identify them as part of the program planning and PPA planning activities of DEP and EPA;
- Hold periodic meetings with staff to promote "bottoms up" innovation and capacity building ideas;

- Incorporate planned innovation and capacity building projects into the agencies' annual PPA/Program Plan and implementation plans; and
- Expressly grant relief on agreed upon outputs.

In an organizational environment where funds are often not available to allow significant new resource investments for capacity building or innovation work, it will be necessary to consider temporary disinvestments from existing work to proceed with these efforts.

Once DEP and EPA have agreed upon capacity building or other innovative work, they will consider and come to agreement on:

- The level of resources necessary to conduct and evaluate the work;
- Any specific disinvestments required to accomplish this new work;
- Any cross-program reassignments that may be needed to support and complete a project; and
- The roles and responsibilities of each agency to support identified projects.

As with any significant investment of limited agency resources, DEP and EPA are committed to measuring, evaluating and learning from all innovation and capacity building projects. To accomplish this, the agencies agree to the following:

- Each identified Innovation or capacity building project will include a measurement and evaluation component;
- Projects will include higher level environmental outcome measures whenever possible, but also may employ activity counts and other performance measures as appropriate;
- The agencies may support projects that do not have easily attainable short-term measures, but may require longer-term measures or the development of new measurement approaches; and
- At the conclusion of each project, an evaluation will be performed to record the lessons learned and to make recommendations for next steps to continue or expand the innovation, apply it to other areas of agency work or discontinue the project.

# **Quality Assurance Management Program (QA/QC)**

In order to ensure that all data generated under this agreement will be of known and documented quality suitable for use as environmental indicators and program outcomes and outputs, the Department and EPA Region I will maintain a Quality Assurance Management Program. The Quality Assurance Management Program is documented in the Department's Quality Management Plan (QMP) developed in 2001 in accordance with EPA Requirements for Quality Management Plan (EPA QA/R-2). The QMP is designed to:

- Ensure that quality assurance project plans completed by DEP or DEP's grantees and contractors meet the EPA Requirement for Quality Assurance Project Plans (EPA QA/R-5) and are completed and approved prior to data collection activities;
- Coordinate quality assurance efforts among the bureaus, programs and offices at DEP;
- Oversee the planning, implementation and assessment of environmental quality assurance programs;
- Oversee the planning, generation, evaluation and reporting of data associated with quality indicators; and
- Schedule the review and updating of the QMP annually to identify and
  make any needed changes to the quality system and submit a revised
  QAPP list (Table 1 of the QMP) to EPA. The Department will
  provide annual updates, including any needed changes and a revised
  QAPP list on January 1 of each year.
- The MA DEP Quality Management Plan was approved by US EPA on October 2, 2001 for five years.

EPA New England's Quality Assurance Office will continue to work with DEP by providing guidance, training and technical support.

# **Reporting Requirements**

EPA, nationally and on a regional basis, is engaged in efforts with states to identify and address opportunities to reduce reporting burdens. DEP is interested in pursuing all efforts that will reduce the resources needed to complete reports and focus resources on more meaningful collection and use of environmental and programmatic information.

During the negotiation of the 2004 Performance Partnership Agreement, DEP and EPA worked to develop a comprehensive list of reporting requirements under the PPA and related documents and agreements. It has not been possible to construct an exhaustive list of all reporting requirements included in the PPA and the underlying and related agreements, laws and regulations. The following are high-priority reporting requirements that are particularly important to DEP's mission and are of particular value to the regulated communities.

Reporting of program data required by federal programs will continue under this agreement as DEP and EPA continue discussions about state reporting requirements to national databases. Of particular interest to DEP and many states is the need to vigorously scrutinize existing state reporting requirements to the national databases. DEP and other states feel that many of the detailed programmatic reporting requirements are meaningless and should be deleted or amended to make them meaningful to EPA, the states, and the public.

DEP continues to work with severely constrained resources and with significantly reduced staffing levels (25% over the past 2 years). Therefore, in the event that DEP must prioritize in meeting reporting requirements, the following high-priority reports are where resources will be dedicated under the 2005-2006 PPA.

### Goal 1: Clean Air - Priority Clean Air Reporting Requirements

Annual Reports on Implementation of the Automobile Inspection and Maintenance I/M Program: The Massachusetts I/M state implementation plan require that the state submit annual reports on its program.

**2002 Update to the National Emission Inventory**: DEP will submit an inventory of ozone and particulate matter precursors by June 1, 2004. Because the 2002 emission inventories will serve as the baselines for progress in attaining the new eight-hour ozone and fine particulate matter standards, these inventories are particularly important.

**Submission of Ambient Monitoring Results to the AIRS Database**: Given the important role of ozone and fine particulate matter monitoring in the designation of attainment and non-attainment areas, DEP will continue to input monitoring data to the AIRS database. DEP is currently submitting this data on a regular basis.

**Massachusetts Nitrogen Oxides (NOx) Budget Program:** For each summertime ozone season, DEP will allocate NOx allowances among subject sources (i.e., power plants) and report them to EPA's Clean Air Markets Division by the April 1<sup>st</sup> three years before the ozone season. Given the importance to air quality of this program, it's critical to meet this requirement, and DEP has been doing so to date. Starting in 2006 and every three years thereafter, DEP is also required to conduct an audit of the implementation of the NOx Allowance Trading Program.

## Clean Air Reporting Required Outside the PPA Process

To provide a context concerning the relationship between federal requirements and the Performance Partnership Agreement (PPA), the following are some examples of federal requirements outside the PPA. These requirements are outside the PPA either because they are outside the scope of the PPA (for example, Clean Water Act State Revolving Fund) or have not been restated in the PPA because they are required in an existing formal source (law, regulation, delegation agreement, etc.) and have not become part of the PPA strategic discussion. These examples provide a good sense of the source and types of requirement outside the PPA, but are by no means an attempt to provide a comprehensive listing of all requirements.

#### **Clean Air Act Provisions**

Example: Section 182 (c) provides the timeline for many SIP submissions requirements due in the 1990's. Partly because DEP has wanted the PPA to only reflect the most significant expectations, the PPA has not always contained every one of these submissions (e.g., requirement to submit ozone precursor inventory every three years). DEP air staff is aware of these requirements.

#### **EPA's SIP Actions in the Federal Register**

Example: EPA sometimes attaches conditions on its approval of SIP submissions. These conditions may require DEP to take some action.

#### **National Data Base**

Example: DEP submits monitoring and compliance information into the AIRS and AFS systems.

#### **Other Grants**

Example: Grants to DEP for PM2.5 monitoring are not included in the PPA and do involve a number of commitments by DEP to report information.

### **Delegation Agreements**

Example: Massachusetts has assumed delegation of numerous MACT, NESHAP or NSPS emission standards. Under the delegation agreement, EPA regularly sends DEP lists of new standards with a request that DEP indicate the standards for which they wish to accept delegation.

### **National Regulations**

Example: The I/M regulations require that each state submit annual reports on its program.

#### **National Guidance Documents**

Example: The request for submissions of ozone and PM designations were issued in guidance document by EPA, and sent to the Governors with letters explaining the importance of the request.

## **Goal 2: Clean and Safe Water**

## **Priority Drinking Water Reporting Requirements**

Monthly Reports on the status and frequency of inspections and certification determinations for in-state microbiological laboratories: MA DEP and EPA R1 have negotiated an aggressive laboratory inspection schedule to ensure that an adequate laboratory inspection and certification schedule is maintained.

**2004 Data Verification Report**: EPA Region I will be conducting a data verification audit via state drinking water file reviews to determine potential discrepancies in complying system inventories, and identifying monitoring and drinking water standards violations.

**Submission of Violation Results to the SDWIS Database**: Timely and accurate information on drinking water system violations is significant indicator of public health protection and performance of drinking water programs. DEP will continue to import such information into SDWIS on a timely basis.

Annual Reports on Capacity Development and Operator Certification Programs: These programs are important to the overall health of the drinking water program. Their particular emphasis is on the need to support small systems, the vast majority of systems in Massachusetts.

**Quarterly Reports on State Water Security Activities**: MA DEP will use grant monies to support state and local coordinator relating to water security and emergency response planning. Close tracking of these efforts will continue to be an important item.

### **Drinking Water Reporting Required Outside the PPA Process**

To provide a context concerning the relationship between federal requirements and the Performance Partnership Agreement (PPA), the following are some examples of federal requirements outside the PPA. These requirements are outside the PPA either because they are outside the scope of the PPA (for example, Clean Water Act State Revolving Fund) or have not been restated in the PPA because they are required in an existing formal source (law, regulation, delegation agreement, etc.) and have not become part of the PPA strategic discussion. These examples provide a good sense of the source and types of requirement outside the PPA, but are by no means an attempt to provide a comprehensive listing of all requirements.

#### **Safe Drinking Water Act Provisions**

Example: Section 1413 of the SDWA (a) provides general timelines by when States must adopt promulgated federal drinking water regulations, and submit appropriate and adequate documentation (e.g., primacy applications). Specific deadlines depend upon the dates on which the respective regulations have been promulgated. Other specific program implementing reporting requirements are embedded within the SDWA, such as notification of systems' variance & exemptions, and the Biennial Wellhead Program Status Report.

#### **National Data Bases**

Example: MA DEP imports drinking water system violations into SDWIS on a regular basis. Underground Injection Control (UIC) program submits quarterly

reports and an annual report to EPA R1 on program activities and measures of success for input into the national database.

#### **Other Grants**

Example: As of 10/30/03, MA DEP has received \$300K dollars in water security funds. Quarterly reports on such grant work progress is required.

#### **Extension Agreements**

Example: Extension Agreements between EPA R1 and MA DEP outline specific extended primacy deadlines, and implementation and reporting requirements appropriate for each rule. Such reporting is particularly important for EPA R1 in cases where the Region has interim primacy enforcement authority.

## **State Revolving Load Program Requirements**

Under the Drinking Water State Revolving Load Fund, the state submits a biannual program report, and annual financial audit, annual capacity development and operator certification implementation reports, list of systems in significant non-compliance (every three years) and electronic input into the NIMS system.

#### **Regional Program Evaluations and IG Audits**

Example: the Inspector General recently completed an audit of State Capacity Development Programs, including the Massachusetts program. Other IG audits or surveys may occur during the year. On a regional level, MA DEP is scheduled for a data verification audit in FY04.

#### **National Regulations**

Periodic updates on the implementation of certain regulations are required by federal regulations and by virtue of state primacy agreements. For example, in 2004, DEP will prepare an update on the status of Ground Water Under the Direct Influence of Surface Water Determinations for non-community systems.

# **National Guidance and Program Measures**

DEP will provide data for of EPA Region 1's report out on the national annual program objectives and measures. Commitments between EPA R1 and EPA OW are reflected in a Memorandum of Agreement.

# Microbiological Laboratory Inspections and Certification Determinations

MA DEP is required to inspect and certify in-state microbiological laboratories on a three-year cycle. There is currently a backlog in certification and an aggressive schedule has been put in place to address this laboratory certification backlog. Monthly updates are sent by MA DEP to EPA.

# **Priority Surface Water Reporting Requirements**

Water Quality Standard Revisions: The Clean Water Act ss303(c) requires the state to hold public hearings at least every three years to review and revise its Water Quality Standards and to submit these new or revised standards to EPA.

**List of Impaired Water**: The Clean Water Act ss 303(d) requires the state establish and periodically revise its priority ranking of waters which do not meet water quality standards. This is now done with the Integrated List which combines the ss 303(d) list with the ss 305(b) list.

**TMDLs**: The Clean Water Act 303(d) requires that state to establish TMDLs and submit them to EPA.

**State Water Quality Reports**: The Clean Water Act ss 305(b) requires states to prepare and submit to EPA a water quality assessment reports every 2 years. This integrated ss305(b)/ss303(d) Listing Report, which combines the ss 303(d) list with the ss 305(b) assessments is due by April 1, 2004 and every two years thereafter.

**Non-Point Source (NPS) Annual Report**: The Clean Water Act ss 319(b)(11) requires that state annually to report and revise as appropriate on its NPS program and plan.

**State Water Monitoring and Assessment Program**: To meet FY 2005 ss 106 grant requirements, the state must submit a Comprehensive Water Monitoring and Assessment Strategy by September 30, 2004. This Strategy must be complete and address the "Elements of a State Water Monitoring and Assessment Program; (final, dated 3/14/03).

# **Surface Water Reporting Required Outside the PPA Process**

To provide a context concerning the relationship between federal requirements and the Performance Partnership Agreement (PPA), the following are some examples of federal requirements outside the PPA. These requirements are outside the PPA either because they are outside the scope of the PPA (for example, Clean Water Act State Revolving Fund) or have not been restated in the PPA because they are required in an existing formal source (law, regulation, delegation agreement, etc.) and have not become part of the PPA strategic discussion. These examples provide a good sense of the source and types of

requirement outside the PPA, but are by no means an attempt to provide a comprehensive listing of all requirements.

#### Other Grants

#### Clean Water Act State Revolving Fund

Annual financial audit, annual program report, annual minority business and women's business (MBE/WBE) report

# Goal 3: Manage Waste and Clean-up Waste Sites

# **Underground Storage Tanks**

**Semi-Annual Activity Report:** This semi-annual report covers confirmed releases from USTs, cleanups initiated, cleanups completed, emergency responses, and releases from upgraded USTs (separate report: see below)

**Leaking Upgraded Tank Report:** This semianual report details the cause of releases from those USTs that have been "upgraded" according to 1998 requirements.

**LUST Grant Dollar Drawdown:** This quarterly (or more frequently if EPA requests it) report documents the amount of funding we have used from available LUST grant funds.

**LUST Grant Closeout "Final FSR":** This report, prepared every two years, details where the LUST grant dollars were spent, on such things as a staff oversight, contractor costs, site-specific cleanup, and tangible items such as pumps, blowers, etc.

# **Priority Site Remediation and Restoration Reporting**

**Superfund Remedial NPL:** The following NPL Sites have been targeted by EPA for FY'04 specific accomplishments and will require MA DEP review and concurrence.

- Remedial Investigation/Feasibility Study Workplan: Sutton Brook Disposal Area in Tewksbury
- Record of Decision (ROD): Iron Horse Park in Billerica, and Shpack Landfill in Norton/Attleboro
- ROD Amendment: Silresim in Lowell
- Explanation of Significant Difference: Norwood PCB in Norwood

- Five Year Review: Silresim, Nyanza in Ashland, Rose Disposal Pit in Lanesboro, Wells G&H in Woburn, Hocomoco Pond in Westborough, WR Grace in Acton, and Baird and McGuire in Holbrook.
- Superfund Reuse Assessment: Hocomoco Pond, WR Grace, Cannons Engineering in Plymouth, and Norwood PCBs.

#### **Superfund Remedial Federal Facilities NPL**

**Records of Decision** – South Weymouth Naval Air Station (2) in South Weymouth; Fort Devens in Devens, and Hanscom Air Force Base in Bedford.

#### **RCRA Corrective Action**

MA DEP must issue a Grant of Environmental Restriction at the **Zeneca** facility in Dighton prior to EPA issuing its consent order for corrective action at the site.

#### **RCRA Permitting Information**

- Permit Renewal Tracking
- Permit/Post Closure Approved Controls In Place tracking

# Site Remediation and Restoration Reporting Outside the PPA

**Superfund Pre-remedial:** MA DEP currently has Superfund Pre-Remedial Cooperative Agreement (V98116401) which also includes Brownfield site Assessment activities (the BSA portion of this cooperative agreement is a continuation of the activities funded under Superfund – prior to the new Brownfields authorization).

MA DEP will review eligible Response Site List and provide feedback on EPA's proposed sites to be excluded from the enforcement bar provision in the new Brownfields legislation.

**Superfund Block Grant:** This report includes National Priority List (NPL) Support Agency activities for 24 NPL sites and core activities for eligible non-site specific work.

Typical activities performed by the state include reviewing and commenting on all major documents, and concurring on records of decision, participating in public meetings and site management meetings, overseeing state contractors, identifying state ARARs, and performing timely communication of issues and concerns. Under the Superfund Regulation , 40 CRF Part 35 Subpart O, MA DEP is required to submit the following under this CA: Quarterly Progress

Reports, Financial Status Reports, MBE/WBE Reports, and Property Inventory Reports, if applicable.

# **Brownfields Reporting Outside the PPA**

Multi-Site Cooperative Agreement/Brownfields Site Assessment: This quarterly report relates to evaluating sites on CERCLIS (EPA's database of sites potentially eligible for NPL listing), including EPA Preliminary Assessment and Site Inspection reports, reviewing No Further Action decisions and decisions to remove sites from the list, and recommending additions to CERCLIS and for NPL listing. We also report on selection of sites for Brownfields Site Assessments and their progress.

**Brownfields Cooperative Agreement**: This quarterly report includes activities listed in our approved grant related to establishing and/or enhancing the program elements contained in the new federal Brownfields legislation, and to developing/maintaining the required public record. We also report on site selection for new Brownfields Site Assessments.

# **Enforcement and Compliance Reporting Outside the PPA**

Regular Reporting of Inspection and Enforcement Information into National Program Data Systems: With the advent of much wider public access to compliance data through EPA's Enforcement and Compliance History Online (ECHO) website in 2002, timely and accurate entry of inspection and enforcement data and quality assurance of the information is of significant importance. In addition, DEP and EPA's increasing focus on using the data in our systems to manage the programs requires that the data be current and of high quality.

**Annual Compliance and Enforcement Performance Report:** This important report summarizes DEP's compliance and enforcement performance for EPA and the public.

# **OES Information Needed from MA DEP**

### RCRA Compliance Program Required Reports /Information

- EOY Report per the PPA
- Data Entry and Maintenance of RCRAInfo for all RCRA Activities

• State specific priority write ups where substituted in lieu of core program activities distributed to the States (e.g., 20% generator coverage, etc.)

# Water Compliance Program Required Reports/Information

- NPDES Minors Reporting 40 CRF 123.45(c) requires that the Region submit to EPA Headquarters an annual reporting of the compliance status of NPDES minor permittees in Massachusetts. The report is to include the total number of minors reviewed, the number of noncomplying minors, the number of enforcement actions issued to minors, and the number of permit schedules extending compliance deadlines. The report is due annually on February 28<sup>th</sup>. EPA requests that MA DEP provide relevant information regarding MA DEP's enforcement against minors conducted during the preceding year so that it can be incorporated into the report.
- NPDES Inspection Reporting Individual EPA 3560 Forms Water Compliance Inspection Reports must be completed for each inspection that the MA DEP would like to have coded into EPA's Permits Compliance System database. Copies of these forms must be submitted to EPA.
- MA DEP Enforcement Actions Copies of all informal and formal water administrative, judicial and penalty enforcement actions must be submitted to EPA. Similarly, EPA provides the MA DEP with copies of all EPA formal and informal enforcement actions.

# Air Compliance Program Required Reports/Information

- EOY Report per the PPA
- Biennial Inspection Plan (Compliance Monitoring Strategy) can be submitted with PPA
- Data Entry and Maintenance of AFS mandatory data elements
- High Priority Violator coordination and reporting to AFS

# **General Grant Reporting Requirements**

Grantees shall submit annual performance reports within 90 days of the end of the grant year. The reports will address: accomplishments as measured against work plan commitments, cumulative effectiveness of the work performed under all work plan components, existing and potential problem areas, suggestions for improvement, including, where feasible, schedules for making the improvements. (40 CFR 31.40 and 40 CRF 35.115

# **Regulation and Policy Development – Fiscal Year 2005**

GOAL 1: CLEAN AIR REGULATION/POLICY GUIDANCE	LEAD BWP DIVISION	STATUS
Beyond ERP Biotech Project: Air Quality regulations and permit standards	BUSINESS COMPLIANCE DIVISION	Developing draft regulations
Lead the Engines and Turbines Beyond ERP Project: promulgate the regulations and develop and coordinate implementation including "presence" (C&E, technical assistance, communication etc.) strategy and guidance material		Developing final rules, expect completion Winter 2005
Regulation Policy and Guidance Development for Air Quality: Opacity Regulations and Limited Plan Approval regulations	BUSINESS COMPLIANCE DIVISION	Developing final regulations, expected to be complete October 2004
Adopt 2007 Backstop Rule for on-road vehicles STAPPA initiative to develop alternative rule in case EPA does not implement new on road vehicle standard	CONSUMER AND TRANSPORTATION DIVISION	Final rule must be promulgated by 12/31/04
Adopt the California Greenhouse Gas standards for mobile sources once CA reg is completed	CONSUMER AND TRANSPORTATION DIVISION	Will begin after CA promulgates final rule (expected Fall 2004)
Develop and implement enhancements to onboard diagnostics testing	CONSUMER AND TRANSPORTATION DIVISION	Contract amendment requires equipment upgrades to be complete by 2/25/05
Revise ZEV Mandate to incorporate an alternative compliance plan voluntary program with other NE states to maximize the use of higher technology vehicles	CONSUMER AND TRANSPORTATION DIVISION	Final rule must be promulgated by 12/31/04
Tunnel Vent Certification Regulations Revisions (310 CMR 7.38)	CONSUMER AND TRANSPORTATION DIVISION	Developing conceptual approach, draft regulations expected Spring 2005
Lead BWP's portion of DEP approach to management of asbestos in soil (with BWSC; FY05: hold public information sessions and hearings, develop final rules, respond to comments, develop & implement "implementation plan")	DEPUTY ASSISTANT COMMISSIONER	Draft regulations, policies are out for public comment until 12/10/04
Decide whether and if so how to implement the CO2 control provisions in 310 CMR 7.29	PLANNING AND EVALUATION DIVISION	Decision expected in Fall 2004

GOAL 1: CLEAN AIR REGULATION/POLICY GUIDANCE	LEAD BWP DIVISION	STATUS
Support DOER, EOEA in developing a policy for using Biomass as an energy source	PLANNING AND EVALUATION DIVISION	On-going coordination with DOER, EOEA
Develop architectural coatings, consumer product and gas container rules for 8-hr ozone SIP, consistent with MA commitment to Ozone Transport Commission due by July 2005	PLANNING AND EVALUATION DIVISION	Developing draft regulations
Develop comments on EPA's proposed rules and guidance affecting ozone attainment and assure that MA positions are appropriately represented in comments prepared by other regional and national organization in which MA is a member	PLANNING AND EVALUATION DIVISION	On-going
Develop position and provide comments on EPA's PM2.5 standards revision	PLANNING AND EVALUATION DIVISION	On-going
Participate in the Ozone Transport Commission's Best Available Control Technology/Lowest Achievable Emission Rate policy development initiative	PLANNING AND EVALUATION DIVISION	Developing draft, due in 2004
Participate in the Regional Greenhouse Gas Initiative by leading the development of a model rule that would establish a regional Greenhouse Gas cap and allowance program for power plants	PLANNING AND EVALUATION DIVISION	Model rule must be developed by April 2005
Provide technical and policy support to MA lawsuits on EPA rule making and mid west utilities	PLANNING AND EVALUATION DIVISION	On-going
Review EPA rules regarding PM2.5 attainment in order to ensure that MA interests are adequately protected.	PLANNING AND EVALUATION DIVISION	On-going

GOAL 2: CLEAN & SAFE WATER REGULATION/POLICY GUIDANCE	DESCRIPTION	STATUS
Wetlands regulations	Codify Mouth of a Coastal River Buffer Zone simplified review Changes in process for appeals	Hearing done for these three, promulgate in fall 04
	Wetlands fees regs	Promulgate in fall (before others)
Waterways regulations and statute	Simplified license for docks and piers < 600 sq. ft	Promulgate in fall - is at EOEA now. Hearing done.
Dredging regulations	Modifications to 401 permitting procedures and requirements.	Public hearing in winter 05 with WQS

GOAL 2: CLEAN & SAFE WATER REGULATION/POLICY GUIDANCE	DESCRIPTION	STATUS
Water Management Act regulations	Substitute statutory definition of safe yield for regulatory and information gathering authority.	Promulgate in fall 04 (hearing done)
Title 5 regulations	Includes revisions required by statute to address grey water, presumptive approval for tight tanks and numerous technical and practical fixes.	Public hearing in late fall 04 or early winter 05
Groundwater discharge permit regulations	Combine Discharge regulations with ground water quality regulations, replace effluent limits with receiving water based standards and incorporate the provisions of recent policies.	Public hearing in spring 05
Water reuse regulations	Establish Regulations covering permitting requirements and procedures for reusing highly treated wastewater.	Public hearing in spring 05
Drinking water regulations	Establishment of an MCL for Perchlorate	Public hearing in winter 05

GOAL 3: MANAGE HAZARDOUS & SOLID WASTE REGULATION/POLICY GUIDANCE	LEAD BWP DIVISION	STATUS
ERP		
Implement Beyond ERP Photo processors project: Develop and promulgate new ERP certification and fee regulations	BUSINESS COMPLIANCE DIVISION	Developing conceptual approach for draft regulations
HAZARDOUS WASTE		
Beyond ERP Biotech Project: Develop and promulgate Hazardous Waste Waiver Regulations that allow DEP to waive certain hazardous waste management requirements (such as onsite treatment of certain wastes) if DEP determines that the threat is insignificant		Developing draft regulations
Beyond ERP Biotech Project: Develop joint EPA/DEP satellite accumulation implementation policy so that MA hazardous waste generators are not subject to two conflicting sets of requirements: Stakeholders, especially BioTech prefer DEP's approach to EPAs	BUSINESS COMPLIANCE DIVISION	Done
Develop Hazardous Waste Resource Conservation and Recovery Act Authorization Regulations - C-4 to C-9 per EPA grant commitment	BUSINESS COMPLIANCE DIVISION	Pilot package in development

GOAL 3: MANAGE HAZARDOUS & SOLID WASTE REGULATION/POLICY GUIDANCE	LEAD BWP DIVISION	STATUS
Participate in the ECOS Project - Functional Equivalence Workgroup designed to provide states with flexibility in the implementation of Federal hazardous waste management requirements (Commissioner Office priority)	BUSINESS COMPLIANCE DIVISION	Workgroup at impasse. Options for seeking resolution being explored
Draft 310 CMR 21( c )regulations	BUSINESS COMPLIANCE DIVISION	Draft planned for 5/11/05
SOLID WASTE		
Beyond ERP Transfer Stations Project: Certification Regulations	BUSINESS COMPLIANCE DIVISION	Developing a proposal for review by RDs, Commissioner's Office
Finalize Beneficial Use Determination Guidance, provide training in its application, ensure consistency of region and Boston determinations, resolve policy questions, maintain a data base of all determinations	BUSINESS COMPLIANCE DIVISION	Developing final guidance based on public comments, will issue with final revisions of 310 CMR 19.000
Promulgate Solid Waste Facility Regulations amendments for beneficial use determinations, facility based impact assessment, and waste bans. 310 CMR 19.000	BUSINESS COMPLIANCE DIVISION	Developing final regulations based on public comment, expect to promulgate by 12/31/04
Complete guidance on controlling hydrogen sulfide emissions at landfills Regular engineering and material separation controls at applicable landfills and processors	CONSUMER AND TRANSPORTATION DIVISION	Developing draft a guidance (based on approved conceptual approach)
Complete guidance for landfills on assessing groundwater contamination & making clean-up decisions. FY 05: review public comments, revise guidance as needed, respond to comments, develop & implement "implementation plan" with BWSC.	DEPUTY ASSISTANT COMMISSIONER AND COMMUNICATIONS	Developing final guidance based on public comments, will issue with final revisions of 310 CMR 19.000
Coordinate policy development for siting new landfill capacity in water quality sensitive areas. FY05: work with solid waste section chiefs to develop policy.	DEPUTY ASSISTANT COMMISSIONER	Parked: Delete from list
INDUSTRIAL WASTEWATER		
Beyond ERP Biotech Project: IWW Certified Operator Regulations and Permit Regulations	BUSINESS COMPLIANCE DIVISION	Developing white paper on infectious waste control issues, expect to publish in Fall 2004

GOAL 3: MANAGE HAZARDOUS & SOLID WASTE REGULATION/POLICY GUIDANCE	LEAD BWP DIVISION	STATUS
		Developing draft regulations for Workgroup review, implementing voluntary program

GOAL 3: WASTE SITE CLEAN UP REGULATION/POLICYGUIDANCE	DESCRIPTION	STATUS
Proposed MCP changes (the package formerly known as "Wave 2)	Amendments to 310 CMR 40.0000 intended to update numerical cleanup standards and strengthen and clarify the performance standards and requirements for the assessment and cleanup of disposal sites.	Out for Public Hearings
"Special Projects" Designation Revisions	Expand the applicability of the "Special Project" status to allow municipalities to sponsor a number of potential Brownfield sites to provide flexibility in meeting the MCP timelines for site assessment and cleanup. Currently the Special Project Designation applies ONLY to projects directly overseen by federal, state or local government entities.	OGC review complete. Preparing for submittal to 2 <sup>nd</sup> Floor.
Asbestos-in-Soil	Revisions to the Massachusetts Contingency Plan, the Air Quality regulations, and the Solid Waste Management regulations to clarify and streamline requirements for assessment and cleanup of asbestos that has been released to the environment.	Out for Public Hearings
Administrative Penalty Regulations 310 CMR 5.00	The changes provide for the imposition of a penalty for failure to notify of a release of oil that is comparable to the penalty imposed for failure to notify of a release of hazardous material, pursuant to M.G.L. c. 21E and 310 CMR 40.0000. The changes also would implement DEP's authority to assess a penalty of up to \$25,000 a day without the prior issuance of a Noncompliance Notice where a Permanent Solution or Remedy Operation Status has not been maintained, or where the terms of an Activity and Use Limitation have been violated, pursuant to M.G.L. c. 21E and 310 CMR 40.0000.	Pulled from current MCP Reg Package to evaluate effect of recent legislation (Oil Spill Bill)
Conducting Feasibility Evaluations under the MCP	Umbrella document and first section of a policy addressing six feasibility evaluations described in the MCP:  • Achieving or Approaching Background • Critical Exposure Pathways • Selection of Remedial Alternatives • Technologies that Reuse, Recycle, Destroy, Detoxify, or Treat Oil and/or Hazardous Materials • Permanent versus Temporary Solutions, and • Reducing Oil and/or Hazardous Materials Levels Below Upper Concentration Limits.  See <a href="http://www.mass.gov/dep/bwsc/files/04-160.pdf">http://www.mass.gov/dep/bwsc/files/04-160.pdf</a>	Final: Guidance on Evaluating the Feasibility of Achieving or Approaching Background.

GOAL 3: WASTE SITE CLEAN UP REGULATION/POLICYGUIDANCE	DESCRIPTION	STATUS
Data Enhancement Initiative	Standardization of QA/QC requirements to raise the bar on data quality and allow for systematic/streamlined review of submittals  See <a href="http://www.mass.gov/dep/bwsc/files/data/qaqcdocs.htm">http://www.mass.gov/dep/bwsc/files/data/qaqcdocs.htm</a>	Final
Perchlorate	New MCP standards and notification criteria; misc reg changes to increase enforceability;	Out for Public Hearing
	Soil-to-groundwater leaching model and validation;	Wells installed and samples taken at UMass Dartmouth
	Draft and implement BWSC Perchlorate Action Plan	Final
	ITRC workgroup on treatment technologies	DEP participating as author
RCRA Corrective Action Authorization	Use the MCP privatized program to assess and cleanup RCRA Corrective Action sites as an authorized state	DEP & EPA discussions ongoing
Audit Triage (Presumptive Certainty)	Design and implement triage screening forms to standardize screening audits and manage resources spent per audit	Workgroup recommendations being implemented
Audit Updates	Publish monthly summaries of DEP audit findings in the LSPA newsletter and the DEP website.  See <a href="http://www.mass.gov/dep/bwsc/audlist.htm">http://www.mass.gov/dep/bwsc/audlist.htm</a>	Ongoing
Updated Petroleum Hydrocarbon Fraction Toxicity Values for the VPH/EPH/APH Methodology	With the Office of Research and Standards, update the oral hydrocarbon fraction toxicity values and derive inhalation reference numbers for the various fractions. See <a href="http://www.mass.gov/dep/ors/files/tphtox03.pdf">http://www.mass.gov/dep/ors/files/tphtox03.pdf</a>	Final
List of Properties with Activity and Use Limitations	Provide an alphabetized list, by City/Town, of properties in Massachusetts where an "Activity and Use Limitation" (AUL) has been recorded or registered.  See <a href="http://www.mass.gov/dep/bwsc/sites/aullist.pdf">http://www.mass.gov/dep/bwsc/sites/aullist.pdf</a>	Final (to be updated periodically)
Best Management Practices for Controlling Exposure to Soil during the Development of Rail Trails	DEP BWSC developed Best Management Practices (BMPs) that could be applied along the right-of-way to appropriately prevent access to residual oil or hazardous material consistent with the provisions of the Municipal Relief Bill.  See <a href="http://www.mass.gov/dep/bwsc/files/railtrail.pdf">http://www.mass.gov/dep/bwsc/files/railtrail.pdf</a>	Final

Revised Guidance	Revised numerous BWSC guidance documents to reflect June 2003 changes to the Fee Regulations and budget-related revisions BWSC Program. Revised guidance documents include:  • Homeowner Oil Spill Cleanup Guide (http://www.mass.gov/dep/bwsc/files/homeownr/handbook/homework.pdf) • Hazardous Waste Transporter Fee Guidance (http://www.mass.gov/dep/bwsc/fees.htm)	Final
BWSC eDEP forms  http://www.mass.gov/dep/bwsc/files/form s/edepbwsc.htm	<ul> <li>BWSC 01, 02, 03 Initial Application for Response Action Permit for Tier 1 Disposal Sites</li> <li>BWSC 10, 20, 30 Application for Supplemental Tier 1 Permit Actions</li> <li>BWSC103 Release Notification &amp; Release Retraction Form</li> <li>BWSC104 Response Action Outcome Statement (RAO)</li> <li>BWSC105 Immediate Response Action Transmittal Form (IRA)</li> <li>BWSC106 Release Abatement Measure Transmittal Form (RAM)</li> <li>BWSC107 Tier Classification Transmittal Form</li> <li>BWSC107A Numerical Ranking System (NRS) Scoresheet</li> <li>BWSC107B Tier II Compliance History</li></ul>	Final

# **Environmental Performance Partnership Agreement: 2005-2006 Compliance and Enforcement Strategy**

#### Introduction

Historically, compliance and enforcement have not had separate and discrete goals in the Department's PPA. For the first time the 2004 PPA included a separate Compliance and Enforcement strategy that referenced and supported the Department's commitments in Sections II and III of that PPA, but again, did not establish separate C/E goals. This PPA for 2005-2006 follows that same format. The Department will implement its Compliance and Enforcement Strategy consistent with the Enforcement and Compliance Assurance Goals and Expectations of the FY 04 Guidance for Compliance Assistance and Innovative Program Strategies in New England Performance Partnership Agreements. Specific attention will be given to taking timely and appropriate enforcement to address significant non-compliers. An annual compliance and enforcement report will be submitted at year's end documenting implementation of the Department's compliance and enforcement strategy and the environmental outcomes that have resulted.

# Targeting C/E Resources (HI/HV Projects)

In the EPA New England Draft 2003-2008 Strategic Framework, compliance and enforcement strategies become a means to give a higher profile and achieve greater results for selected objectives. The EPA document lists specific programs (Title V, air toxics, MACT compliance, wet weather program, pesticides, and RCRA) as areas to be emphasized.

In a similar approach, the Department has incorporated compliance and enforcement objectives within the programmatic work plans in the 2005-06 PPA/Program Plan as a tool to achieve environmental goals. The Department will emphasize its underlying commitment to environmental protection and environmental justice by implementing strategies to most effectively direct its constrained compliance and enforcement resources. Areas of focus will include:

illegal wetlands alteration;

- preventing and addressing improper asbestos removal and disposal;
- healthy air/diesel idling;
- landfills with the highest potential to expose sensitive receptors;
- waste-site clean-up in urban areas;
- abandoned tanks:
- LSP enforcement;
- · targeted non-responders; and
- site discovery.

These targeted initiatives are described in more detail in the following section. The descriptions of some of these initiatives appear elsewhere in this PPA in the Air, Water, Waste and Healthy Communities sections. The descriptions are repeated here to give a "stand-alone" overview of the Department's C&E initiatives

# **Targeted C/E Initiatives in Response to Resource Constraints**

Traditionally, the Department's Compliance and Enforcement Program targeted a mix of facilities, sites, and protected resources based on priorities established through commitments to EPA, program specific initiatives and regulatory requirements, and responses to complaints. Going forward, the Department is committed to analyzing the way C/E priorities are set and C/E activities are targeted in order to refine the manner and intensity of C/E operations. The Department's aim is to match the desired environmental outcomes with the relative risk and compliance status of each sector. Unequivocally, Compliance and Enforcement will remain a high priority, but C/E activity outputs are likely to be reduced and further risk-based strategic choices on the allocation of resources will be required.

One part of the response to these challenges is to take full advantage of the efficiencies that information technology offers. The Department will use information technology to assess and refine compliance strategies and hone

enforcement tools to ensure that the environmental quality that results from its C/E performance is improved, not diminished.

During the 2005-2006 PPA period, the Department intends to launch a set of initiatives that exemplify the principles of information-based strategic targeting, meaningful measurement and streamlined implementation that will be the benchmarks of the Department's approach to compliance and enforcement.

#### **Ground-Truthing Wetlands Loss**

Preserving intact wetlands is an essential element to maintaining the functions that wetlands provide. DEP's Wetlands Conservancy Program has been developing reliable and verifiable data on freshwater wetlands loss using a GIS based system to compare aerial photographs of current wetlands with photos of past years. This information allows us to identify where the wetland losses are occurring so that we can begin to figure out what the causes are, and develop strategies to reduce loss. After a period of implementation, we can conduct additional photographic and data analysis to see where new loss has occurred, to determine if the causes have changed, and to evaluate the effectiveness of our strategies to reduce loss.

DEP intends to intensively redirect resources into a compliance strategy and enforcement response that compels the remediation of past illegal alterations, collects the economic benefit obtained by illegal filling, communicates that non-compliance will be uncovered, and clarifies which elements of the local permitting process need to strengthened to prevent further uncontrolled wetland loss.

For additional information on DEP's Wetlands Loss program, see http://mass.gov/dep/brp/epp/exwetwp.html.

#### **Asbestos Enforcement Initiative**

The Department's goal is to enhance and support enforcement of asbestos regulations and protection of public health through increased targeted inspections and publicizing results of inspection efforts and recent enforcement cases. Targeted inspections, resolution of selected ongoing enforcement cases, and compilation of recent enforcement actions have taken place between mid-January and the end of February 2004.

To facilitate our ability to target the most likely and significant violations and to develop the strongest deterrence message possible, the initiative includes several elements:

- Bundling of Recent Asbestos Enforcement Cases: Each region will review enforcement cases of the past six months and prepare summaries of significant cases that support the initiative.
- Development and Resolution of Ongoing Enforcement Cases: Each region will prepare summaries of ongoing asbestos enforcement cases, identifying cases of which enforcement actions can be completed by the spring of 2004. OEC will contact the Attorney General's Office to discuss the status of referred asbestos cases and determine what cases can be completed or referred back to DEP for potential inclusion in public information announcements.
- <u>Targeted Inspections:</u> DEP will increase asbestos inspections, targeting inspections based on the potential risk of exposure.
- Off-Hour Inspections: To increase our ability to discover violations, enforcement staff will perform inspections during weekends and evenings during the initiative.

#### **Urban Area Compliance Assurance**

The environmental quality of our urban areas, particularly those that are designated as environmental justice neighborhoods, is a critical concern to DEP for several important reasons. Residents of these communities are often subjected to multiple sources of pollution that have been demonstrated, as in the case of asthma, to contribute to elevated incidence or risk of adverse health effects. Older, deteriorated housing and abandoned industrial operations are also more likely to expose neighborhood residents to asbestos and other contaminants. Urban properties that are contaminated with oil and hazardous waste often languish because of the recalcitrance of property owners or responsible parties who cannot or will not assess and clean-up the contamination. Such properties present not only health and environmental concerns, but also impede the growth of commercial and residential development.

Mitigation of urban pollution and acceleration of site clean-ups directly complements the goal of sustainable development by removing environmental quality stressors and increasing the stock of developable urban land.

The Department will use facility and site information data and GIS mapping systems in concert with inter-agency brownfield development initiatives to implement an urban enforcement strategy that will target Tier 1B/D default sites, mobile and stationary air pollution sources, abandoned tanks and asbestos removal and renovation projects. The aim is to reduce air contamination levels, increasing the rate and quality of site clean-ups and supporting the development of sustainable businesses and affordable housing.

#### **Urban Non-Responder NORA/Lien Enforcement Project**

This project will provide publicly funded waste site cleanup in support of enforcement effort in urban areas. Efforts will be targeted to sites that:

- Are in noncompliance because they either failed to complete preliminary assessment and tier classification or failed to perform required actions;
- Are located in an urban setting;
- The potentially responsible parties (PRP) own the property (location of the site) and appear to have the financial resources to perform response actions;
- The property value appears to exceed environmental liability;
- Are near schools, water supply Zone II's or other sensitive receptors; and
- Pose a significant threat.

**Strategy:** DEP will issue enforcement actions to the potentially responsible parties (PRPs) that will include several elements:

- 1. Issue a Notice of Response Action (NORA) establishing a date for response or penalties;
- If the PRP does not respond by compliance date of NORA or if PRP decides not to perform response actions, issue Notice of Intent to Mobilize (NOIM), establishing that DEP's contractor will be taking over, when the contractor will begin work and reiterating the PRP's liability, treble damages and the lien that will be in place on the property;
- 3. If PRP decides to undertake response actions after DEP has issued NORA/NOIM, then DEP will pursue an ACOP that includes a strict schedule, settles any outstanding costs to DEP and establishes that the PRP has the financial resources to complete the job; and

4. DEP Initiates Cost recovery/super lien provision.

#### **License Site Professional (LSP) Enforcement**

When auditing, triaging or otherwise reviewing response action submittals or information about releases, DEP will routinely consider whether an License Site Professional (LSP) of Record should be cited for noncompliance with the MCP. Such noncompliance will most likely be observed when an Response Action Outcome (RAO) submitted by an Responsible Party (RP), Potentially Responsible Party (PRP) or Other Person (OP) is found to be invalid or DEP learns that response actions have been conducted at a contaminated property prior to submittal of a required Immediate Response Action (IRA) or Relief Abatement Measure (RAM) Plan. DEP will also review audit and triage findings to determine if a pattern of poor performance associated with an LSP of interest represents a basis for LSP enforcement.

- An updated guidance document on LSP Enforcement will be developed. The guidance will explain when DEP may pursue enforcement against an LSP, environmental consulting firm and/or contractor for violations of the MCP as well as explain the enforcement document development and review process for such enforcement actions.
- The policy will urge that parallel enforcement be undertaken against the RP/PRP or OP, as applicable. Information that may serve as the basis for enforcement action against an LSP may come to light as the enforcement action against the LSP's client is resolved.
- Periodic enforcement actions that send the message to LSPs and RPs, PRPs and OPs and the public that DEP is serious about compliance with the MCP.

# **Beyond ERP**

The Environmental Results Program (ERP) laid the foundation of a novel regulatory approach that evaluates compliance based on a sector's unique performance indicators and then designs the compliance assistance and enforcement responses to fit the sector's particular operational characteristics and compliance deficiencies. Compliance assurance was based on self-certification backed up by, but not dependent upon, field inspections combined with biannual outcome-oriented performance measurements. DEP successfully applied this model to printers, photo processors and dry

cleaners. The original ERP achieved substantial compliance gains from businesses that were too numerous and small for the typical annual field inspection tactics.

"Beyond ERP" is designed to build on the ERP foundation by extending its principles to a broad array of facilities and improving its performance measurement methodology by incorporating compliance rate targets and root cause analysis. Combining careful targeting with compliance rate and "root cause" assessment will boost DEP's ability to devise streamlined compliance solutions for specific business sectors. Compliance assurance strategies for Beyond ERP business sectors will be designed to address specific performance shortfalls and measure when non-compliance problems are resolved. This will allow DEP to strategically realign our C/E resources to focus on the most important and intransigent problems. DEP intends over the course of the year to continue developing the "Beyond ERP" approach through:

- Continued Assessment and program oversight streamlining on six sectors: solid waste transfer stations, Biotech facilities, small engines and turbines (distributed generators), mercury discharges from dental offices, stage II gasoline facilities, and photo processors. These projects are being done as part of a "design/build strategy" to help inform the overall design of the Beyond ERP initiative;
- 2. Assessment and program oversight of new sectors for FFY05: Illegal dischargers to drinking water protection areas, closed landfills, soils processors, asbestos, and other targets to be identified:
- 3. Implementation of new oversight strategy that provides routine field oversight to "most risky" facilities, and report review and appropriate enforcement response to other sources; and
- 4. Development and implementation of new inspection types to be used in assessment and to broaden our field presence.

Specific "Beyond ERP" projects include:

#### **Diesel**

 Beyond ERP: HIHV School bus Idling: inspect and take appropriate enforcement actions against school buses that violate the anti-idling rules

#### Asbestos

- Beyond ERP: Asbestos at Construction and Demolition Debris Processors Project: develop policies, revise permits as needed
- Beyond ERP: Asbestos Targeted Group and HIHV:
  - Asbestos in soils regulation and policy development
  - Develop Routine Building Maintenance Asbestos Guidance
  - Revise Asbestos Base Penalty Amounts
  - Develop Asbestos Cement Shingle Guidance
  - Asbestos Inspection Protocol for Solid Waste Handling Facilities

#### **Solid Waste Facilities**

- Beyond ERP: HIHV project: Inactive Landfill Assessment
- Beyond ERP: Petroleum Contaminated Soils Processors Project
- Beyond ERP: Transfer Station Project: Alternative Penalty Policy
- Beyond ERP: Transfer Station Project: Certification Regulations

#### Industrial Waste Water

- Beyond ERP: Biotech Project: IWW Certified Operator Regulations and Permit Standards
- Beyond ERP: Illegal Discharges to Drinking Water Protection Areas Targeted Group lead
- Beyond ERP: Dental Mercury Project: Development
- Beyond ERP: Dental Mercury: Manage the voluntary certification process

#### Measures of C/E Success

During the period of the 2005-06 PPA/Program Plan, the Department will continue its ongoing efforts to develop specific outcome-oriented measures of success that link attainment of a programmatic environmental goal, such as promoting healthy stream flow or increasing the rate of waste site cleanups, with an assessment of the extent and nature of a sector's non-compliance. As set out in more detail in the 2004 C/E Accomplishment Report, in many cases, specific compliance rate improvement targets have been set for which data will be collected in 2005 and 2006. The results of the compliance data assessment will be used in determining which set of C/E strategies and tools will be most

effective in achieving both the program's compliance target and the broader environmental goals.

Compliance and Enforcement Measures developed in 2004 and being actively collected include:

#### Goal 1: Clean Air

# Objective: Compliance with Ambient Air Quality Standards and Federal Acid Rain Standards

As a group, Air Operating Permit sources are the most significant stationary sources of the air contaminants of greatest concern for ozone, acid rain and particulate formation, as well as certain air toxics emissions. The air operating permits codify all of the existing emission limits and associated operating, monitoring, record keeping, and reporting requirements designed to ensure that they do not cause or contribute to violations of ambient air quality standards.

#### **Primary Measure of Success:**

Air operating permit sources operating in compliance with permit requirements

# **Goal 2: Clean and Safe Water**

# Objective: Safe Drinking Water Primary Measure of Success:

Proportion of population served by systems in compliance with all *health-based* standards, not including reporting violations.

# Objective: Prevent Surface Water Degradation from "Point" Discharges to Groundwater

Improve compliance with groundwater permit discharge limits.

# **Primary Measure of Success:**

Reduce the rate of significant noncompliance (SNC) with effluent limits.

### **Objective: Healthy Stream Flow**

The Water Management Act (WMA) uses permit and registrations to manage the amount of water withdrawn from a watershed basin by higher volume users in order to ensure that there is adequate stream flow to preserve the watershed's ecology.

#### **Primary Measure of Success:**

Percent of WMA registrants and/or permit holders in compliance with WMA authorized system-wide withdrawal volumes.

- Raise cranberry bog compliance with WMA authorized systemwide withdrawal volumes.
- Raise public water supply (PWS) compliance with WMA authorized system-wide withdrawal volumes
- Raise non-PWS/non-bog compliance with WMA authorized system-wide withdrawal volumes

Compliance rate targets for each of these particular sectors have been set using performance standards applicable to each sector, for instance, authorized system water withdrawal, unaccounted for water use, per capita use and percentage of facilities brought into WMA universe.

# Goal 3: Preserve and Restore the Land

#### **Objective: Maximize Risk Reduction**

A primary goal of the waste site cleanup program is to ensure that time-critical risks at sites are mitigated to the maximum extent feasible and as quickly as possible. To that end, the Massachusetts Contingency Plan (MCP) requires that Immediate Response Actions (IRAs) be taken in response to all 2-hour and 72-hour notification conditions.

#### **Primary Measures of Success:**

- Compliance rate for initiation of IRAs to address 2/72 hour releases
- Compliance rate for meeting IRA status report deadlines
- Current number of outstanding IRA deadline violations

Target compliance rates are to be determined.

# **Objective: Increase the Rate of Cleanup**

The MCP requires that all reported sites be cleaned up, and that a Response Action Outcome statement (RAO) be submitted to DEP, within five years of the completion of a preliminary site assessment. For most sites, the deadline for preliminary assessment or Tier classification is one year from release notification, thus the cleanup deadline is six years from notification. Many sites are cleaned up within the first year, prior to the preliminary assessment deadline. One of BWSC's main goals is to increase the overall rate of cleanup. To achieve that goal, BWSC uses enforcement and other incentives at all

major deadlines, with particular emphasis on the preliminary assessment and RAO deadline.

#### **Primary Measures of Success:**

- Compliance rate for RAO deadline
- Percent of sites that achieve RAO within 1 year
- Average time to RAO (bell curve analysis)
- Current number outstanding RAO deadline violations

Target compliance rates are to be determined.

#### **Objective: Ensure the Quality of Cleanups**

This goal is focused on ensuring that response actions performed under the supervision of Licensed Site Professionals are done in substantial compliance with the performance standards of the MCP. To pursue this objective, BWSC uses site audits, enforcement, training, technical assistance, and direct oversight of response actions in limited circumstances.

#### **Primary Measure of Success:**

During FY04, BWSC developed standardized, reproducible metrics to evaluate BWSC's success in ensuring the quality of cleanups. DEP commits to dedicating resources to perform at least the number of Level 1 audits (full reviews) recommended in any year. The order in which specific audits will be performed will be determined by Departmental priorities.

### Objective: Safe Landfill Disposal

Ensuring that landfill disposal is safely conducted will be assessed in terms of the percent of facilities in compliance with solid waste landfill core regulatory requirements.

#### **Primary Measure of Success:**

Permitted Open Landfills that are established constructed in accordance with approved plans, and operated and maintained in accordance with permit and regulatory requirements.

### **Goal 4: Healthy Communities and Ecosystems**

# **Objective: Decrease Environmental Impact of Printing Operations**

The performance of the printer sector of the Environmental Results Program will assess printing operations' compliance with the hazardous waste management and industrial waste water rules and the adoption of pollution prevention technology, such as silver recovery, and practices that reduce the emissions of air and water pollutants and generation of hazardous waste.

#### **Primary Measure of Success:**

Increasing compliance rate and pollution prevention practices in printing operations.

# Objective: Improve Compliance at Solid Waste Transfer Stations

The bureau has set a compliance rate goal for key regulatory compliance requirements. Compliance will be evaluated through inspections and annual certifications that will be newly required in FY 2005

#### **Primary Measure of Success:**

Assess baseline compliance rate with selected indicators.

# **Environmental Performance Partnership Agreement 2005-2005 Fiscal Year 2005 Grant Budget**

	Fiscal Year 2005 Federal Budget
Personnel Fringe Benefits (27%)	\$ 6,071,896 \$ 1,639,411
Travel	\$ 66,532
Equipment	\$ 25,765
Supplies	\$ 134,070
Contractual	\$ 2,757,787
Construction	\$ 0
Other	\$ 253,716
Total Direct	\$10,949,177
Indirect Charges (@32.76% of Federal Salary Base) (@20.64% of State Match Salaries)	\$ 3,631,011
Total	\$14,580,188